

Conforms to ANSI Z400.1-2010 Standard - HCS 2012

Protective Clothing	General Hazard	DOT
Consult your supervisor or S.O.P. for special handling		₹ 22

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name: NEOGARD URETHANE VERTICAL ADDITIVE

Product identity: 990JB00000, 7922

Additive Product type:

1.2 Relevant identified uses of the substance or mixture and uses advised against

Field of application: used only as part of two- or multi component products.

Identified uses: Industrial/Professional use

TSCA: Unless otherwise stated. All components are listed or exempted.

1.3 Details of the supplier of the safety data sheet

NEOGARD, a Division of Hempel (USA), Inc. Company details:

> 2728 Empire Central Dallas, TX 75235

Phone number: 1-214-353-1600 E-mail: hempel@hempel.com

1.4 Emergency telephone number (with hours of operation)

For Transportation Emergencies :

(24 hours)

CHEMTREC: 1-800-424-9300 (Toll-free in the U.S., Canada and the U.S. Virgin Islands) 703-527-3887

For calls originating elsewhere (Collect calls are accepted). Contract number: CCN10384

To preserve the effectiveness of arrangements for providing accurate and timely emergency response information, the basic identifying information (shipper name or contract number) must be included on

shipping papers.

If the purchaser of this product is going to be shipping this product to other locations, the purchaser must arrange for its own Emergency Information Provider to respond to transport incidents. Hempel's

24 hour response contract does not cover non-Hempel shipments.

For all other information: In USA toll free calling available: 1-800- 678-6641 or (936)-523-6000

(8 AM - 5 PM CST) See Section 4 of the safety data sheet (first aid measures).

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

OSHA/HCS status: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR

1910.1200).

GHS Classification: ACUTE TOXICITY (oral) - Category 4

EYE IRRITATION - Category 2B CARCINOGENICITY - Category 2

2.2 Label elements

Hazard pictograms:





Signal word: Warning

H302 - Harmful if swallowed. Hazard statements:

H320 - Causes eye irritation.

H351 - Suspected of causing cancer.

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SECTION 2: Hazards identification

Precautionary statements:

Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been read and

understood. Wear protective gloves, protective clothing and eye or face protection. Do not eat, drink

or smoke when using this product. Wash thoroughly after handling.

Response: IF exposed or concerned: Get medical advice or attention. IF SWALLOWED: Call a POISON CENTER

or doctor if you feel unwell. Rinse mouth. 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.

Storage: Store locked up.

Disposal: Dispose of contents and container in accordance with all local, regional, national and international

regulations.

Supplemental label elements: None known.

2.3 Other hazards

Hazards not otherwise classified: None known.

SECTION 3: Composition/information on ingredients

Product definition : Mixture
Physical state : Liquid.

Product/ingredient name	Identifiers	%	GHS Classification
4,4'-methylenebis(2-ethylaniline)	19900-65-3	≥25 - ≤50	ACUTE TOXICITY (oral) - Category 4 EYE IRRITATION - Category 2B CARCINOGENICITY - Category 2

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

Occupational exposure limits, if available, are listed in Section 8.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

SECTION 4: First aid measures

4.1 Description of first aid measures

General: In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth

to an unconscious person.

If breathing is irregular, drowsiness, loss of consciousness or cramps: Call 911 and give immediate

treatment (first aid).

Eye contact: Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15

minutes, occasionally lifting the upper and lower eyelids. In all cases of doubt, or when symptoms

persist, seek medical attention.

Inhalation: Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if

respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Give nothing by

mouth. If unconscious, place in recovery position and seek medical advice.

Skin contact: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use

recognized skin cleanser. Do NOT use solvents or thinners.

Ingestion: If swallowed, seek medical advice immediately and show this container or label. Keep person warm

and at rest. Do not induce vomiting unless directed to do so by medical personnel. Lower the head so

that vomit will not re-enter the mouth and throat.

Protection of first-aiders: No action shall be taken involving any personal risk or without suitable training. It may be dangerous to

the person providing aid to give mouth-to-mouth resuscitation.

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects

Eye contact : Causes serious eye irritation.

Inhalation: No known significant effects or critical hazards.

Skin contact: No known significant effects or critical hazards.

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SECTION 4: First aid measures

Ingestion: Harmful if swallowed.

Over-exposure signs/symptoms

Eye contact: Adverse symptoms may include the following:

pain or irritation watering redness

Inhalation:

Skin contact:

No specific data.

No specific data.

No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician: If gasses have been inhaled, from the decomposition of the product, symptoms may be delayed.

Specific treatments: No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Extinguishing media: Recommended: alcohol resistant foam, CO₂, powders, water spray.

Not to be used: waterjet.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or

mixture :

In a fire or if heated, a pressure increase will occur and the container may burst. This material is very

toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous combustion products: Decomposition products may include the following materials: carbon oxides nitrogen oxides

5.3 Advice for firefighters

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard. Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid all direct contact with the spilled material. Refer to protective measures listed in sections 7 and 8. No action shall be taken involving any personal risk or without suitable training. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.

6.2 Environmental precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

6.3 Methods and materials for containment and cleaning up

Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Contaminated absorbent material may pose the same hazard as the spilled product.

6.4 Reference to other sections

See Section 1 for emergency contact information.

See Section 8 for information on appropriate personal protective equipment.

See Section 13 for additional waste treatment information.

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SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid inhalation of vapour, dust and spray mist. Avoid contact with skin and eyes. Eating, drinking and smoking should be prohibited in area where this material is handled, stored and processed. Appropriate personal protective equipment: see Section 8. Always keep in containers made from the same material as the original one.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in a cool, well-ventilated area away from incompatible materials and ignition sources. Keep out of the reach of children. Keep away from: Oxidizing agents, strong alkalis, strong acids. No smoking. Prevent unauthorized access. Containers that are opened must be carefully resealed and kept upright to prevent leakage.

7.3 Specific end use(s)

See separate Product Data Sheet for recommendations or industrial sector specific solutions.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Product/ingredient name	Exposure limit values
No exposure limit value known.	

Recommended monitoring procedures

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

8.2 Exposure controls

Appropriate engineering controls

Provide local exhaust and general ventilation systems to maintain airborne concentrations below OSHA, ACGIH, and manufacturer recommended exposure limits. Local exhaust ventilation is preferred because it prevents contaminant dispersion into work areas by controlling it at its source. Use local and general exhaust ventilation to effectively remove and prevent buildup of mists/vapors/fumes generated from the handling of this product.

Note: Local exhaust ventilation is designed to capture an emitted contaminant at or near its source, before the contaminant has a chance to disperse into the workplace air. General exhaust ventilation, also called dilution ventilation, is different from local exhaust ventilation because instead of capturing emissions at their source and removing them from the air, general exhaust ventilation allows the contaminant to be emitted into the workplace air and then dilutes the concentration of the contaminant to an acceptable level (e.g., to the PEL or below).

Individual protection measures

General: Gloves must be worn for all work that may result in soiling. Apron/coveralls/protective clothing must be

worn when soiling is so great that regular work clothes do not adequately protect skin against contact

with the product. Safety eyewear should be used when there is a likelihood of exposure.

Hygiene measures: Wash hands, forearms, and face thoroughly after handling compounds and before eating, smoking,

using lavatory, and at the end of day.

Eye/face protection: Safety eyewear complying with an approved standard should be used when a risk assessment

indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of

protection: chemical splash goggles.

Hand protection: Wear chemical-resistant gloves in combination with 'basic' employee training. The quality of the

chemical-resistant protective gloves must be chosen as a function of the specific workplace

concentrations and quantity of hazardous substances.

Since the actual work situation is unknown. Supplier of gloves should be contacted in order to find the

appropriate type.

Body protection: Personal protective equipment for the body should be selected based on the task being performed and

the risks involved handling this product.

Respiratory protection : Use appropriate respiratory protection if there is a risk of exceeding any exposure limits.

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SECTION 8: Exposure controls/personal protection

Protective clothing (pictograms):

Consult your supervisor or S.O.P. for special handling

Note: Application of paint products by spraying requires additional safety precautions: Full body suit, Full face respirator with air supplied.

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state : Liquid.
Color : Clear

Odor: Non-characteristic.

pH: Testing not relevant or not possible due to nature of the product.

Melting point/freezing point: -57°C This is based on data for the following ingredient: tributyl O-acetylcitrate

Boiling point/boiling range: Testing not relevant or not possible due to nature of the product.

Flash point : Closed cup: 213°C (415.4°F)

Evaporation rate: Testing not relevant or not possible due to nature of the product.

Flammability: Flammable in the presence of the following materials or conditions: open flames, sparks and static

discharge and heat.

Upper/lower flammability or

explosive limits :

No specific data.

Vapor pressure: 0 kPa This is based on data for the following ingredient: tributyl O-acetylcitrate

Vapor density: Testing not relevant or not possible due to nature of the product.

Relative density: 1.052 g/cm³

Partition coefficient (LogKow): Testing not relevant or not possible due to nature of the product.

Auto-ignition temperature: Testing not relevant or not possible due to nature of the product.

Decomposition temperature: Testing not relevant or not possible due to nature of the product.

Viscosity: Testing not relevant or not possible due to nature of the product.

Explosive properties : Not available.

Oxidizing properties: Testing not relevant or not possible due to nature of the product.

9.2 Other information

Solvent(s) % by weight 0 % (w/w)

(Included excempt solvent(s)):

Water % by weight : Weighted average: 0 %

VOC content (Coatings): 0 lbs/gal (0 g/l)
VOC content (Regulatory): 0 lbs/gal (0 g/l)

TOC Content (Volatile): Weighted average: 0 g/l
Solvent Gas: Weighted average: 0.046 m³/l

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SECTION 10: Stability and reactivity

10.1 Reactivity

No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability

The product is stable.

10.3 Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid

No specific data.

10.5 Incompatible materials

Reactive or incompatible with the following materials: oxidizing materials, acids and alkalis.

10.6 Hazardous decomposition products

When exposed to high temperatures (i.e. in case of fire) harmful decomposition products may be formed:

Decomposition products may include the following materials: carbon oxides nitrogen oxides

SECTION 11: Toxicological information

11.1 Information on toxicological effects

No known significant effects or critical hazards.

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
4,4'-methylenebis(2-ethylaniline)	LD50 Oral	Rat	>1000 mg/kg	-

Acute toxicity estimates

Route	ATE value
Oral	1909.51 mg/kg

Information on the likely routes of exposure

Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential chronic health effects

Other information: No additional known significant effects or critical hazards.

SECTION 12: Ecological information

12.1 Toxicity

Do not allow to enter drains or watercourses. Very toxic to aquatic life with long lasting effects.

When spilled, this product may act as an oil, causing a film, sheen, emulsion, or sludge at or beneath the surface of a body of water. Oils of any kind can cause: (a) drowning of waterfowl due to lack of buoyancy, loss of insulating capacity of feathers, starvation and vulnerability to predators due to lack of mobility; (b) lethal effect on fish by coating gill surfaces, preventing respiration; (c) potential fish kills resulting from alteration in biochemical oxygen demand; (d) asphyxiation of benthic life forms when floating masses become engaged with surface debris and settle on the bottom; and (e) adverse aesthetic effects of fouled shoreline and beaches.

12.2 Persistence and degradability

12.3 Bioaccumulative potential

12.4 Mobility in soil

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SECTION 12: Ecological information

Soil/water partition coefficient

No known data avaliable in our database.

(K_{oc}) : Mobility :

No known data avaliable in our database.

12.5 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Disposal should be in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national requirements.

The information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations.

Refer to Section 7 and Section 8 for additional handling information and protection of employees.

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

Transport may take place according to national regulation or DOT for transport by road and by train, IMDG for transport by sea, IATA for Air shipment. Refer to specific Dangerous Goods Transport requirements under 49CFR, ICAO and IATA.

	14.1 UN no.	14.2 Proper shipping name	14.3 Transport hazard class(es)	14.4 PG*	14.5 Env*	Additional information
DOT Code	UN3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (4,4'-methylenebis(2-ethylaniline)). (4,4'-methylenebis(2-ethylaniline))	9	III	Yes.	The marine pollutant mark is not required when transported on inland waterways in sizes of ≤5 L or ≤5 kg or by road, rail, or inland air in non-bulk sizes.
TDG Code	UN3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (4,4'-methylenebis(2-ethylaniline)). (4,4'-methylenebis(2-ethylaniline))	9 (1)	III	Yes.	Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.43-2.45 (Class 9), 2.7 (Marine pollutant mark), Non-bulk packages of this product are not regulated as dangerous go
SCT Code	UN3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (4,4'-methylenebis(2-ethylaniline))	9	III	Yes.	The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg.
IMDG Code	UN3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (4,4'-methylenebis(2-ethylaniline)). (4,4'-methylenebis(2-ethylaniline))	9	III	Yes.	This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8. Emergency schedules F-A, S-F
IATA Code	UN3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (4,4'-methylenebis(2-ethylaniline))	9 4	III	Yes.	This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8.

Code : Classification PG* : Packing group

Env.* : Environmental hazards

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SECTION 14: Transport information

14.6 Special precautions for user

Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 Transport in bulk according to IMO instruments

Not applicable.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

U.S. Federal regulations: All components are active or exempted.

TSCA 8(a) CDR Exempt/Partial exemption: Not determined

United States inventory (TSCA 8b): All components are active or exempted.

Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs) : Not listed

Clean Air Act Section 602 Class I Substances : Not listed
Clean Air Act Section 602 Class II Substances : Not listed
DEA List I Chemicals (Precursor Chemicals) : Not listed
DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 311/312 Classification: ACUTE TOXICITY (oral) - Category 4

EYE IRRITATION - Category 2B CARCINOGENICITY - Category 2

Product/ingredient name	%	Classification
4,4'-methylenebis(2-ethylaniline)	≥25 - ≤50	ACUTE TOXICITY (oral) - Category 4 EYE IRRITATION - Category 2B CARCINOGENICITY - Category 2

State regulations: Connecticut Carcinogen Reporting: None of the components are listed.

Connecticut Hazardous Material Survey: None of the components are listed.

Florida substances: None of the components are listed.

Illinois Chemical Safety Act: None of the components are listed.

Illinois Toxic Substances Disclosure to Employee Act: None of the components are listed.

Louisiana Reporting: None of the components are listed.
Louisiana Spill: None of the components are listed.
Massachusetts Substances: None of the components are listed.
Massachusetts Spill: None of the components are listed.
Michigan Critical Material: None of the components are listed.

Minnesota Hazardous Substances: None of the components are listed.

New Jersey Spill: None of the components are listed.

New Jersey Toxic Catastrophe Prevention Act: None of the components are listed.

New Jersey Hazardous Substances: None of the components are listed. **New York Hazardous Substances**: None of the components are listed.

New York Toxic Chemical Release Reporting: None of the components are listed. Pennsylvania RTK Hazardous Substances: None of the components are listed. Rhode Island Hazardous Substances: None of the components are listed.

This product does not require a Safe Harbor warning under California Prop. 65.

SECTION 16: Other information

Remarks: Note: In USA, consult Code of Federal Regulations, Title 29, Labor, Parts 1910 and 1915 concerning

occupational safety and health standards and regulations, as well as any other applicable Federal,

State or local regulations that apply to safe practices in coating operations.

Warning! If you scrape, sand, or remove old paint, you may release lead dust. LEAD is TOXIC.

Validation: Validated by US - HSE Products Coordinator on 19 December 2023

GHS Classification

Procedure used to derive the classification.

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SECTION 16: Other information

Classification	Justification
EYE IRRITATION - Category 2B	Calculation method Calculation method Calculation method

Hazardous Material Information System (U.S.A.)

Personal protection

National Fire Protection Association (U.S.A.)



Personal Protective Equipment (PPE) shown in this section is a suggestion. Since conditions vary from one work location to another consult the facility safety & health program. Customer or end user is responsible to evaluate worker exposure conditions at the site of application and determine the appropriate PPE suitable for workers at that particular facility or location

Abbreviations and acronyms:

ANSI = American National Standards Institute HCS = Hazardous Communication System TSCA = Toxic Substances Control Act CFR = Code of federal Regulations

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

OSHA = United States Occupational Health and Safety Administration NIOSH = National Institute for Occupational Safety and Health

ACGIH = American Conference of Industrial Hygienists IARC = International Agency for Research on Cancer.

NTP = National Toxicology Program ATE = Acute Toxicity Estimate

OECD = Organisation for Economic Co-operation and Development

BCF = Bioconcentration Factor

DOT = United States Department of Transportation

ERG = Emergency Response Guide

TDG = Transport of Dangerous Goods, Canada SCT = Transportation & Communications Ministry, Mexico

IMDG = International Maritime Dangerous Goods IATA = International Air Transport Association

SARA = Superfund Amendments Reauthorization Act

EPCRA = Emergency Planning and Community Right to Know Act

Notice to reader



Indicates information that has changed from previously issued version.

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

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