



SAFETY DATA SHEET

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Revision Date: 03/17/2014

Print Date: 5/29/2014

MSDS Number: 000000246077

Version: 1.1

Neomatrix™ biofunctional
™ Trademark, Ashland or its subsidiaries, registered
in various countries845014

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

| | | |
|-------------------------|---|--------------------------------|
| Ashland | Regulatory Information Number | 1-800-325-3751 |
| P.O. Box 2219 | Telephone | 614-790-3333 |
| Columbus, OH 43216 | Emergency telephone number | 1-800-ASHLAND (1-800-274-5263) |
| Product name | Neomatrix™ biofunctional | |
| | ™ Trademark, Ashland or its subsidiaries, registered in various countries | |
| Product code | 845014 | |
| Product Use Description | Personal care | |

2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance: liquid

NOTICE: WHILE THIS MATERIAL HAS A LOW LEVEL OF TOXICITY, GOOD INDUSTRIAL HYGIENE PRACTICES ARE ENCOURAGED TO MINIMIZE EXPOSURE.

Potential Health Effects

Exposure routes

Inhalation, Skin absorption, Skin contact, Eye Contact, Ingestion

Eye contact

May cause mild eye irritation. Symptoms include stinging, tearing, and redness.

Skin contact

Unlikely to cause skin irritation or injury.

Ingestion

Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful.

Inhalation

Breathing of vapor or mist is possible. Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful. Symptoms are not expected at air concentrations below the recommended exposure limits, if applicable (see Section 8.).

Aggravated Medical Condition

Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: lung (for example, asthma-like conditions)

Symptoms

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Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include:, irritation (nose, throat, airways)

Target Organs

Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals:, mild, reversible liver effects, mild, reversible kidney effects

Carcinogenicity

This material is not listed as a carcinogen by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP), or the Occupational Safety and Health Administration (OSHA).

Reproductive hazard

Based on the available information, risk to the fetus from maternal exposure to this material cannot be assessed.

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Hazardous Components | CAS-No. / Trade Secret No. | Concentration |
|----------------------|----------------------------|---------------|
| GLYCERIN | 56-81-5 | >=30-<40% |

4. FIRST AID MEASURES

Eyes

If symptoms develop, move individual away from exposure and into fresh air. Flush eyes gently with water while holding eyelids apart. If symptoms persist or there is any visual difficulty, seek medical attention.

Skin

First aid is not normally required. However, it is recommended that exposed areas be cleaned by washing with soap and water.

Ingestion

Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. If possible, do not leave individual unattended.

Inhalation

If symptoms develop, move individual away from exposure and into fresh air. If symptoms persist, seek medical attention. If breathing is difficult, administer oxygen. Keep person warm and quiet; seek immediate medical attention.

Notes to physician

Hazards: No information available.

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Treatment: No hazards which require special first aid measures.

5. FIREFIGHTING MEASURES

Suitable extinguishing media

Dry chemical, Carbon dioxide (CO₂), Water spray

Hazardous combustion products

Aldehydes, carbon dioxide and carbon monoxide, Nitrogen oxides (NO_x)

Precautions for fire-fighting

Wear full firefighting turn-out gear (full Bunker gear), and respiratory protection (SCBA). Use water spray to cool fire exposed containers and structures until fire is out if it can be done with minimal risk. Avoid spreading burning material with water used for cooling purposes.

NFPA Flammable and Combustible Liquids Classification

not applicable

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

For personal protection see section 8. Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.

Environmental precautions

Prevent spreading over a wide area (e.g. by containment or oil barriers). Do not let product enter drains. Do not flush into surface water or sanitary sewer system.

Methods for cleaning up

Keep in suitable, closed containers for disposal. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

Other information

Comply with all applicable federal, state, and local regulations.

7. HANDLING AND STORAGE

Handling

Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed.

Storage

Store in a cool, dry, ventilated area.

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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

| GLYCERIN | | 56-81-5 | |
|----------|----------------------------|----------|----------------------|
| OSHA Z1 | Permissible exposure limit | 15 mg/m3 | Total dust. |
| OSHA Z1 | Permissible exposure limit | 5 mg/m3 | Respirable fraction. |

General advice

These recommendations provide general guidance for handling this product. Personal protective equipment should be selected for individual applications and should consider factors which affect exposure potential, such as handling practices, chemical concentrations and ventilation. It is ultimately the responsibility of the employer to follow regulatory guidelines established by local authorities.

Exposure controls

Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

Eye protection

Not required under normal conditions of use. Wear splash-proof safety goggles if material could be misted or splashed into eyes.

Skin and body protection

Wear resistant gloves (consult your safety equipment supplier).

Respiratory protection

A NIOSH-approved air-purifying respirator with an appropriate cartridge and/or filter may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits (if applicable) or if overexposure has otherwise been determined. Protection provided by air-purifying respirators is limited. Use a positive pressure, air-supplied respirator if there is any potential for uncontrolled release, exposure levels are not known or any other circumstances where an air-purifying respirator may not provide adequate protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|----------------|----------------|
| Physical state | liquid |
| Flash point | not applicable |

10. STABILITY AND REACTIVITY

Stability

Stable.

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Conditions to avoid

Heat, flames and sparks.

Incompatible products

Strong bases, Strong oxidizing agents

Hazardous decomposition products

acrolein, Aldehydes, carbon dioxide and carbon monoxide

Hazardous reactions

Product will not undergo hazardous polymerization.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : Inhalation
Skin absorption
Skin contact
Eye Contact
Ingestion

Product

Acute oral toxicity : No data available

Acute inhalation toxicity : No data available

Acute dermal toxicity : No data available

Skin corrosion/irritation : No data available

Serious eye damage/eye irritation : No data available

Respiratory or skin sensitisation : No data available

Target Organ Systemic Toxicant : Target Organs: Overexposure to this material (or its components)
- Repeated exposure has been suggested as a cause of the following effects in laboratory animals:, mild, reversible liver effects, mild, reversible kidney effects

Components:

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GLYCERIN:

Acute oral toxicity : LD 50 Rat: 12,600 mg/kg
Method: OECD Test Guideline 401

Acute inhalation toxicity : LC 50 Rat: > 570 mg/m3
Exposure time: 1 h

Acute dermal toxicity : LD 50 Rabbit: > 10 g/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity**Product:**

No data available

Components:**GLYCERIN:**

Toxicity to fish : LC 50 (Goldfish (*Carassius auratus*)): > 5,000 mg/l
Exposure time: 24 h
Method: Static
Mortality

Toxicity to daphnia and other : LC 50 (Water flea (*Daphnia magna*)): > 10,000 mg/l
aquatic invertebrates : Exposure time: 24 h
Method: Static
Mortality

Persistence and degradability**Product:**

No data available

Components:

No data available

Bioaccumulative potential**Product:**

No data available

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Components:

GLYCERIN:

Partition coefficient: n- : log Pow: -1.76
octanol/water

Mobility in soil

Product:

No data available

Components:

No data available

13. DISPOSAL CONSIDERATIONS

Waste disposal methods

Dispose of in accordance with all applicable local, state and federal regulations.

14. TRANSPORT INFORMATION

REGULATION

| ID NUMBER | PROPER SHIPPING NAME | *HAZARD CLASS | SUBSIDIARY HAZARDS | PACKING GROUP | MARINE POLLUTANT / LTD. QTY. |
|-----------|----------------------|---------------|--------------------|---------------|------------------------------|
| | | | | | |

U.S. DOT - ROAD

Not dangerous goods

U.S. DOT - RAIL

Not dangerous goods

U.S. DOT - INLAND WATERWAYS

Not dangerous goods

TRANSPORT CANADA - ROAD

Not dangerous goods

TRANSPORT CANADA - RAIL

Not dangerous goods

TRANSPORT CANADA - INLAND WATERWAYS

Not dangerous goods

INTERNATIONAL MARITIME DANGEROUS GOODS

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Not dangerous goods

INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO

Not dangerous goods

INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER

Not dangerous goods

MEXICAN REGULATION FOR THE LAND TRANSPORT OF HAZARDOUS MATERIALS AND WASTES

Not dangerous goods

*ORM = ORM-D, CBL = COMBUSTIBLE LIQUID

Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

15. REGULATORY INFORMATION

California Prop. 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

SARA Hazard Classification

SARA 311/312 Classification

No SARA Hazards

SARA 313 Component(s)

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.

Notification status

| | |
|---|-------------------------|
| US. Toxic Substances Control Act | e (special case) |
| Canada. Canadian Environmental Protection Act (CEPA). Domestic Substances List (DSL). (Can. Gaz. Part II, Vol. 133) | q (quantity restricted) |
| Australia. Industrial Chemical (Notification and Assessment) Act | n (Negative listing) |
| Japan. ENCS - Existing and New Chemical Substances Inventory | n (Negative listing) |
| Korea. Toxic Chemical Control Law (TCCL) List | n (Negative listing) |
| Philippines. The Toxic Substances and Hazardous and Nuclear Waste Control Act | n (Negative listing) |
| China. Inventory of Existing Chemical Substances | n (Negative listing) |

HMIS

NFPA

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| | | |
|------------------|----|----|
| Health | 1 | 1 |
| Flammability | 1 | 1 |
| Physical hazards | 0 | |
| Instability | | 0 |
| Specific Hazard | -- | -- |

16. OTHER INFORMATION

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This MSDS has been prepared by Ashland's Environmental Health and Safety Department (1-800-325-3751).

List of abbreviations and acronyms that could be, but not necessarily are, used in this safety data sheet :

ACGIH : American Conference of Industrial Hygienists

BEI : Biological Exposure Index

CAS : Chemical Abstracts Service (Division of the American Chemical Society).

CMR : Carcinogenic, Mutagenic or Toxic for Reproduction

FG : Food grade

GHS : Globally Harmonized System of Classification and Labeling of Chemicals.

H-statement : Hazard Statement

IATA : International Air Transport Association.

IATA-DGR : Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

ICAO : International Civil Aviation Organization

ICAO-TI (ICAO) : Technical Instructions by the "International Civil Aviation Organization"

IMDG : International Maritime Code for Dangerous Goods

ISO : International Organization for Standardization

logPow : octanol-water partition coefficient

LCxx : Lethal Concentration, for xx percent of test population

LDxx : Lethal Dose, for xx percent of test population.

ICxx : Inhibitory Concentration for xx of a substance

Ecxx : Effective Concentration of xx

N.O.S.: Not Otherwise Specified

OECD : Organization for Economic Co-operation and Development

OEL : Occupational Exposure Limit

P-Statement : Precautionary Statement

PBT : Persistent , Bioaccumulative and Toxic

PPE : Personal Protective Equipment

STEL : Short-term exposure limit

STOT : Specific Target Organ Toxicity

TLV : Threshold Limit Value

TWA : Time-weighted average

vPvB : Very Persistent and Very Bioaccumulative

WEL : Workplace Exposure Level

CERCLA : Comprehensive Environmental Response, Compensation, and Liability Act

DOT : Department of Transportation

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FIFRA : Federal Insecticide, Fungicide, and Rodenticide Act
HMIRC : Hazardous Materials Information Review Commission
HMIS : Hazardous Materials Identification System
NFPA : National Fire Protection Association
NIOSH : National Institute for Occupational Safety and Health
OSHA : Occupational Safety and Health Administration
PMRA : Health Canada Pest Management Regulatory Agency
RTK : Right to Know
WHMIS : Workplace Hazardous Materials Information System