



# BioSolve

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 03/09/2017

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Version: 3.4

### SECTION 1: Identification

#### 1.1. Identification

Product form : Mixture  
Trade name : BioSolve  
Product code : BIO

#### 1.2. Recommended use and restrictions on use

Use of the substance/mixture : Remediation of Hydrocarbons (Oil, Fuel, petrochemical) contamination, including: impacted soils, suppression of VOC's, decontamination of equipment and protective clothing, and surface washing  
Recommended use : Surface cleaning

#### 1.3. Supplier

The Biosolve Company  
24 Victory Lane  
Dracut, MA 01826 - USA  
T 1-800-225-3909 - US, Canada, Mexico, Puerto Rico 1-781-482-7900  
All Other Locations [admin@biosolve.com](mailto:admin@biosolve.com) - [www.biosolve.com](http://www.biosolve.com)

Distributed in Canada by: R&L Energy Rentals Ltd.  
Box 718 Rocky Mountain House  
Alberta T4T1A5  
403-895-7465

#### 1.4. Emergency telephone number

Emergency number : 24 Hour Medical Emergency Number: 1-800-535-5053

### SECTION 2: Hazard(s) identification

#### 2.1. Classification of the substance or mixture

##### GHS US classification

Serious eye damage/eye irritation Category 2B Causes eye irritation

#### 2.2. GHS Label elements, including precautionary statements

##### GHS US labeling

Signal word (GHS US) : Warning  
Hazard statements (GHS US) : Causes eye irritation  
Precautionary statements (GHS US) : Wash hands, forearms and face thoroughly after handling.  
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.

#### 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	%	GHS US classification
Nonylphenol, ethoxylated, Branched	(CAS-No.) 127087-87-0	5 – 10	Flam. Liq. 4, H227 Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318 Eye Irrit. 2A, H319

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

Full text of hazard classes and H-statements : see section 16

### SECTION 4: First-aid measures

#### 4.1. Description of first aid measures

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.

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|---------------------------------------|--|
| First-aid measures after skin contact | : Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention.   |
| First-aid measures after eye contact  | : 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    | : Call a poison center/doctor/physician if you feel unwell.  |

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

- |                                     |                        |
|-------------------------------------|------------------------|
| Symptoms/effects after skin contact | : Irritation.          |
| Symptoms/effects after eye contact  | : Mild eye irritation. |

### 4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

## SECTION 5: Fire-fighting measures

### 5.1. Suitable (and unsuitable) extinguishing media

### 5.2. Specific hazards arising from the chemical

- |  |                                |
|--|--------------------------------|
| Hazardous decomposition products in case of fire | : Toxic fumes may be released. |
|--|--------------------------------|

### 5.3. Special protective equipment and precautions for fire-fighters

- |                                |  |
|--------------------------------|--|
| Protection during firefighting | : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing. |
|--------------------------------|--|

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

- |                      |  |
|----------------------|--|
| Protective equipment | : Gloves. Safety glasses.  |
| Emergency procedures | : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Avoid contact with skin, eyes and clothing. Gather the product and place it in a spare container that has been suitably labeled. Stop the leak. Turn leaking containers leak-side up to prevent the escape of liquid. Dispose of waste product or used containers according to local regulations. Rinse with plenty of water. |

#### 6.1.2. For emergency responders

- |                      |   |
|----------------------|---|
| Protective equipment | : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection". |
|----------------------|---|

### 6.2. Environmental precautions

Do not allow to enter drains or water courses. Harmful to aquatic life. Notify authorities if product enters sewers or public waters.

### 6.3. Methods and material for containment and cleaning up

- |                         |   |
|-------------------------|---|
| Methods for cleaning up | : Take up liquid spill into absorbent material.                 |
| Other information       | : Dispose of materials or solid residues at an authorized site. |

### 6.4. Reference to other sections

For further information refer to section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

- |                               |  |
|-------------------------------|--|
| Precautions for safe handling | : Avoid contact with skin and eyes. Wear personal protective equipment. Ensure good ventilation of the work station. Do not freeze.          |
| Handling temperature          | : > 35 (35 – 120) °F   |
| Hygiene measures              | : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product. |

### 7.2. Conditions for safe storage, including any incompatibilities

- |                        |  |
|------------------------|--|
| Storage conditions     | : Store in a well-ventilated place. Keep cool. |
| Maximum storage period | : ≥ 10 year                                    |

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

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### BioSolve

No additional information available

### Nonylehenol, ethoxylated, Branched (127087-87-0)

No additional information available

## 8.2. Appropriate engineering controls

- Appropriate engineering controls : Ensure good ventilation of the work station.  
Environmental exposure controls : Take all necessary measures to avoid accidental discharge of products into drains and waterways due to the rupture of containers or transfer systems.

## 8.3. Individual protection measures/Personal protective equipment

### Hand protection:

Protective gloves

### Eye protection:

Safety glasses

### Skin and body protection:

Wear suitable protective clothing

### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

### Personal protective equipment symbol(s):



## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Liquid.
Color	: red
Odor	: Fresh
Odor threshold	: No data available
pH	: 9.2 – 9.6
pH solution	: 9.2 – 9.6
Melting point	: Not applicable
Freezing point	: -2 °C
Boiling point	: 129 °C
Flash point	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Specific gravity / density	: 1.01 g/cm <sup>3</sup>
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available

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Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

### 9.2. Other information

Percent Solids	: 32 %
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## SECTION 10: Stability and reactivity

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

None under normal use. Stable under normal conditions of use.

### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

### 10.5. Incompatible materials

Strong acids. Strong bases. Oxidizing agent.

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## 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

BioSolve	
LC50 inhalation rat (mg/l)	3.6 mg/l
ATE US (vapors)	3.6 mg/l/4h
ATE US (dust, mist)	3.6 mg/l/4h

Skin corrosion/irritation	: Not classified pH: 9.2 – 9.6
Serious eye damage/irritation	: Causes eye irritation. pH: 9.2 – 9.6
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity – single exposure	: Not classified
Specific target organ toxicity – repeated exposure	: Not classified
Aspiration hazard	: Not classified
Viscosity, kinematic	: No data available
Symptoms/effects after skin contact	: Irritation.
Symptoms/effects after eye contact	: Mild eye irritation.

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### SECTION 12: Ecological information

#### 12.1. Toxicity

Ecology - general : Not readily biodegradable, according to appropriate OECD test due to properties of several components. The surfactants used in this preparation are over 90 % biodegradable according to OECD Test Guideline 301B (OECD, Paris, 1981).

#### 12.2. Persistence and degradability

##### **Nonylehenol, ethoxylated, Branched (127087-87-0)**

Persistence and degradability	Biodegradable in water.
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#### 12.3. Bioaccumulative potential

##### **BioSolve**

BCF fish 1	87 – 344
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Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
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##### **Nonylehenol, ethoxylated, Branched (127087-87-0)**

Bioaccumulative potential	Low potential for bioaccumulation (molecular mass $\geq 700$ g/mol).
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#### 12.4. Mobility in soil

##### **BioSolve**

Ecology - soil	No (test) data on mobility of the components available.
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##### **Nonylehenol, ethoxylated, Branched (127087-87-0)**

Ecology - soil	No (test) data on mobility of the substance available.
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#### 12.5. Other adverse effects

No additional information available

### SECTION 13: Disposal considerations

#### 13.1. Disposal methods

Regional legislation (waste) : Disposal must be done according to official regulations.  
Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions. Must follow special treatment according to local regulation.  
Sewage disposal recommendations : Disposal must be done according to official regulations.  
Product/Packaging disposal recommendations : Do not discharge into the sewer. Do not discharge into surface water. Do not discharge unmonitored into the environment.  
Additional information : Consult an expert on waste disposal or treatment.

### SECTION 14: Transport information

#### Department of Transportation (DOT)

In accordance with DOT

Not applicable

#### Transportation of Dangerous Goods

Not applicable

#### Transport by sea

Not applicable

#### Air transport

Not applicable

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### SECTION 15: Regulatory information

#### 15.1. US Federal regulations

##### **Nonylehenol, ethoxylated, Branched (127087-87-0)**

Listed on the United States TSCA (Toxic Substances Control Act) inventory

EPA TSCA Regulatory Flag

XU - XU - indicates a substance exempt from reporting under the Chemical Data Reporting Rule, (40 CFR 711).

#### 15.2. International regulations

##### CANADA

##### **Nonylehenol, ethoxylated, Branched (127087-87-0)**

Listed on the Canadian DSL (Domestic Substances List)

##### EU-Regulations

No additional information available

##### National regulations

No additional information available

#### 15.3. US State regulations

No additional information available

### SECTION 16: Other information

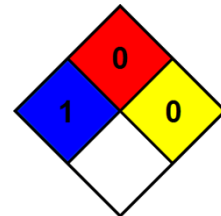
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NFPA health hazard : 1 - Materials that, under emergency conditions, can cause significant irritation.

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 : 1 Slight Hazard - Irritation or minor reversible injury possible

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.

Personal protection : B

B - Safety glasses, Gloves

SDS US (GHS HazCom 2012)

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.*