



SECTION 1: IDENTIFICATION

- 1.1 GHS Product identifier:** Norbrook Laboratories Ltd – Flunixin S injection - ANADA 200-476
60644
- Other means of identification:**
Not applicable (N/A)
- 1.2 Recommended use of the chemical and restrictions on use:**
Relevant uses: Active substance
Uses advised against: All uses not specified in this section or in section 7.3
- 1.3 Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party:**
Norbrook Laboratories Ltd
Carnbane Industrial Estate
BT35 6QQ Newry - Northern Ireland
Phone: +44 (0)28 3026 4435 - Fax: +44 (0)28 3026 5060
<http://www.norbrook.com>
- 1.4 Emergency phone number:** 913 599 5777

SECTION 2: HAZARD(S) IDENTIFICATION

- 2.1 Classification of the substance or mixture:**
29 CFR 1910.1200:
Classification of this product has been carried out in accordance with paragraph (d) of § 1910.1200.
Carc. 2: Carcinogenicity, Category 2, H351
STOT RE 1: Specific target organ toxicity, repeated exposure, Category 1, H372
- 2.2 Label elements:**
29 CFR 1910.1200:
Danger
- 
- Hazard statements:**
Carc. 2: H351 - Suspected of causing cancer.
STOT RE 1: H372 - Causes damage to organs through prolonged or repeated exposure.
- Precautionary statements:**
P201: Obtain special instructions before use.
P202: Do not handle until all safety precautions have been read and understood.
P260: Do not breathe dust/fume/gas/mist/vapours/spray.
P264: Wash thoroughly after use.
P270: Do not eat, drink or smoke when using this product.
P308+P313: IF exposed or concerned: Get medical advice/attention.
P314: Get medical advice/attention if you feel unwell.
P501: Dispose of contents and / or containers in accordance with regulations on hazardous waste or packaging and packaging waste respectively.
- Substances that contribute to the classification**
1-deoxy-1-(methylamino)-D-glucitol 2-[2-methyl-3-(perfluoromethyl)anilino]nicotinate (CAS: 42461-84-7); 2,2'-iminodiethanol (CAS: 111-42-2)
- Additional labeling:**
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- WARNING**
This product can expose you to chemicals including 2,2'-iminodiethanol, which is [are] known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.
- 2.3 Hazards not otherwise classified (HNOC):**
Not applicable (N/A)

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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances:

Non-applicable

3.2 Mixtures:

Chemical description: Organic compounds

Components:

Remaining components are non-hazardous and/or present at amounts below reportable limits. The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200. Therefore, in accordance with Appendix D to § 1910.1200, the product contains:

Identification	Chemical name/Classification	Concentration
CAS: 42461-84-7	1-deoxy-1-(methylamino)-D-glucitol 2-[2-methyl-3-(perfluoromethyl)anilino]nicotinate Acute Tox. 3: H301+H331; Eye Irrit. 2A: H319; STOT RE 1: H372; STOT SE 3: H335 - Danger	Proprietary
CAS: 108-95-2	phenol Acute Tox. 3: H301+H311+H331; Flam. Liq. 4: H227; Muta. 2: H341; Skin Corr. 1B: H314; STOT RE 2: H373 - Danger	Proprietary
CAS: 111-42-2	2,2'-iminodiethanol Acute Tox. 4: H302; Carc. 2: H351; Eye Dam. 1: H318; Skin Irrit. 2: H315; STOT RE 2: H373 - Danger	Proprietary

To obtain more information on the hazards of the substances consult sections 11, 12 and 16.

Other information:

Identification	Specific concentration limit
phenol CAS: 108-95-2	% (w/w) >=3: Skin Corr. 1B - H314 1<= % (w/w) <3: Skin Irrit. 2 - H315 % (w/w) >=1: Eye Irrit. 2 - H319

SECTION 4: FIRST-AID MEASURES

4.1 Description of necessary measures:

The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt, seek medical attention for direct exposure to the chemical product or persistent discomfort, showing the SDS of this product.

By inhalation:

Remove the person affected from the area of exposure, provide with fresh air and keep at rest. In serious cases such as cardiorespiratory failure, artificial resuscitation techniques will be necessary (mouth to mouth resuscitation, cardiac massage, oxygen supply, etc.) requiring immediate medical assistance.

By skin contact:

Remove contaminated clothing and footwear, rinse skin or shower the person affected if appropriate with plenty of cold water and neutral soap. In serious cases see a doctor. If the product causes burns or freezing, clothing should not be removed as this could worsen the injury caused if it is stuck to the skin. If blisters form on the skin, these should never be burst as this will increase the risk of infection.

By eye contact:

Rinse eyes thoroughly with water for at least 15 minutes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, as this could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS of the product.

By ingestion/aspiration:

Do not induce vomiting, but if it does happen keep the head down to avoid aspiration. Keep the person affected at rest. Rinse out the mouth and throat, as they may have been affected during ingestion.

4.2 Most important symptoms/effects, acute and delayed:

Acute and delayed effects are indicated in sections 2 and 11.

4.3 Indication of immediate medical attention and special treatment needed, if necessary:

Not applicable (N/A)

SECTION 5: FIRE-FIGHTING MEASURES

5.1 Suitable (and unsuitable) extinguishing media:

Suitable extinguishing media:

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SECTION 5: FIRE-FIGHTING MEASURES (continued)

Product is non-flammable under normal conditions of storage, manipulation and use, but the product contains flammable substances. In the case of inflammation as a result of improper manipulation, storage or use preferably use polyvalent powder extinguishers (ABC powder), in accordance with the Regulation on fire protection systems.

Unsuitable extinguishing media:

IT IS RECOMMENDED NOT to use full jet water as an extinguishing agent.

5.2 Specific hazards arising from the chemical:

As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.

5.3 Special protective equipment and precautions for fire-fighters:

Depending on the magnitude of the fire it may be necessary to use full protective clothing and individual respiratory equipment. Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...)

Additional provisions:

As in any fire, prevent human exposure to fire, smoke, fumes or products of combustion. Only properly trained personnel should be involved in firefighting. Evacuate nonessential personnel from the fire area. Destroy any source of ignition. In case of fire, refrigerate the storage containers and tanks for products susceptible to inflammation. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:

For non-emergency personnel:

Isolate leaks provided that there is no additional risk for the people performing this task. Personal protection equipment must be used against potential contact with the spilt product (See section 8). Evacuate the area and keep out those who do not have protection.

For emergency responders:

Wear protective equipment. Keep unprotected persons away. See section 8.

6.2 Environmental precautions:

This product is not classified as hazardous to the environment. Keep product away from drains, surface and underground water.

6.3 Methods and materials for containment and cleaning up:

For accidental releases in excess of reportable quantities (RQ) (Table 302.4), refer to 40 CFR 302 for detailed instructions concerning reporting requirements and notify the National Response Center (800) 424-8802.

Absorb the spillage using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. For any concern related to disposal consult section 13.

6.4 Reference to other sections:

See sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling:

A.- General precautions for safe use

Comply with the current legislation concerning the prevention of industrial risks with regards manually handling weights. Maintain order, cleanliness and dispose of using safe methods (section 6).

B.- Technical recommendations for the prevention of fires and explosions

Product is non-flammable under normal conditions of storage, manipulation and use. It is recommended to transfer at slow speeds to avoid the generation of electrostatic charges that can affect flammable products. Consult section 10 for information on conditions and materials that should be avoided.

C.- Technical recommendations on general occupational hygiene

Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

D.- Technical recommendations to prevent environmental risks

It is recommended to have absorbent material available at close proximity to the product (See subsection 6.3)

7.2 Conditions for safe storage, including any incompatibilities:

A.- Technical measures for storage

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SECTION 7: HANDLING AND STORAGE (continued)

Maximum Temp.: 86 °F

B.- General conditions for storage

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

7.3 Specific end use(s):

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters:

Substances whose occupational exposure limits have to be monitored in the workplace:

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000):

Identification	Occupational exposure limits		
	phenol CAS: 108-95-2	8-hour TWA PEL	5 ppm
Ceiling Values - TWA PEL			

US. ACGIH Threshold Limit Values (2022):

Identification	Occupational exposure limits		
	2,2'-iminodiethanol CAS: 111-42-2	TLV-TWA	
TLV-STEL			
phenol CAS: 108-95-2	TLV-TWA	5 ppm	
	TLV-STEL		

CALIFORNIA- TABLE AC-1 PERMISSIBLE EXPOSURE LIMITS FOR CHEMICAL CONTAMINANTS:

Identification	Occupational exposure limits		
	2,2'-iminodiethanol CAS: 111-42-2	PEL	0.46 ppm
STEL			
phenol CAS: 108-95-2	PEL	5 ppm	19 mg/m ³
	STEL		

Biological limit values:

Biological Exposure Indices (BEIs®) - ACGIH


Identification	BEIs®	Determinant	Sampling Time
phenol CAS: 108-95-2	250 mg/L	Phenol in urine	End of shift

8.2 Appropriate engineering controls:

A.- Individual protection measures, such as personal protective equipment

Always provide effective general and, when necessary, local exhaust ventilation to maintain the ambient workplace atmosphere below the exposure limits.. For more information on Personal Protection Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For additional information see subsection 7.1. All information contained herein is a recommendation, the information on clothing performance must be combined with professional judgment, and a clear understanding of the clothing application, to provide the best protection to the worker. All chemical protective clothing use must be based on a hazard assessment to determine the risks for exposure to chemicals and other hazards. Conduct hazard assessments in accordance with 29 CFR 1910.132.


B.- Respiratory protection

Pictogram	PPE	Remarks
 Mandatory respiratory tract protection	Filter mask for gases and vapours	Replace when there is a taste or smell of the contaminant inside the face mask. If the contaminant comes with warnings it is recommended to use isolation equipment. Use respirator in accordance with manufacturer's use limitations and OSHA standard 1910.134 (29CFR)

C.- Specific protection for the hands


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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)



Pictogram	PPE	Remarks
 Mandatory hand protection	NON-disposable chemical protective gloves	The Breakthrough Time indicated by the manufacturer must exceed the period during which the product is being used. Do not use protective creams after the product has come into contact with skin. Use gloves in accordance with manufacturer's use limitations and OSHA standard 1910.138 (29CFR)

As the product is a mixture of several substances, the resistance of the glove material can not be calculated in advance with total reliability and has therefore to be checked prior to the application.



D.- Eye and face protection

Pictogram	PPE	Remarks
 Mandatory face protection	Face shield	Clean daily and disinfect periodically according to the manufacturer's instructions. Use if there is a risk of splashing. Use this PPE in accordance with manufacturer's use limitations and OSHA standard 1910.133 (29CFR)

E.- Bodily protection

Pictogram	PPE	Remarks
 Mandatory complete body protection	Disposable clothing for protection against chemical risks	For professional use only. Clean periodically according to the manufacturer's instructions.
 Mandatory foot protection	Safety footwear for protection against chemical risk	Replace boots at any sign of deterioration. Use foot protection in accordance with manufacturer's use limitations and OSHA standard 1910.136 (29CFR)

F.- Additional emergency measures

Emergency measure	Standards	Emergency measure	Standards
 Emergency shower	ANSI Z358-1 ISO 3864-1:2011, ISO 3864-4:2011	 Eyewash stations	DIN 12 899 ISO 3864-1:2011, ISO 3864-4:2011

Environmental exposure controls:

In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container. For additional information see subsection 7.1.D

40 CFR Part 59 (VOC):

V.O.C.(weight-percent):	21.22 % weight
V.O.C. at 68 °F:	820.15 kg/m ³ (820.15 g/L)
Components:	Not applicable (N/A)

California Air Resources Board (CARB) - VOC Regulatory:

V.O.C.(weight-percent):	21.22 % weight
V.O.C. at 68 °F:	820.15 kg/m ³ (820.15 g/L)

South Coast Air Quality Management District (AQMD) - VOC Regulatory:

V.O.C.(weight-percent):	21.22 % weight
V.O.C. at 68 °F:	820.15 kg/m ³ (820.15 g/L)

Ozone Transport Commission (OTC) Rules - VOC Regulatory:

V.O.C.(weight-percent):	21.22 % weight
V.O.C. at 68 °F:	820.15 kg/m ³ (820.15 g/L)

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

*Not relevant due to the nature of the product, not providing information property of its hazards.

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)

9.1 Information on basic physical and chemical properties:

For complete information see the product datasheet.

Appearance:

Physical state at 68 °F:	Liquid
Appearance:	Not available
Color:	Not available
Odor:	Not available
Odour threshold:	Not applicable (N/A) *

Volatility:

Boiling point at atmospheric pressure:	233 °F
Vapour pressure at 68 °F:	2200 Pa
Vapour pressure at 122 °F:	11593.78 Pa (11.59 kPa)
Evaporation rate at 68 °F:	Not applicable (N/A) *

Product description:

Density at 68 °F:	1035.1 kg/m ³
Relative density at 68 °F:	1.035
Dynamic viscosity at 68 °F:	Not applicable (N/A) *
Kinematic viscosity at 68 °F:	Not applicable (N/A) *
Kinematic viscosity at 104 °F:	Not applicable (N/A) *
Concentration:	Not applicable (N/A) *
pH:	Not applicable (N/A) *
Vapour density at 68 °F:	Not applicable (N/A) *
Partition coefficient n-octanol/water 68 °F:	Not applicable (N/A) *
Solubility in water at 68 °F:	Not applicable (N/A) *
Solubility properties:	Not applicable (N/A) *
Decomposition temperature:	Not applicable (N/A) *
Melting point/freezing point:	Not applicable (N/A) *

Flammability:

Flash Point:	Non Flammable (>199.4 °F)
Flammability (solid, gas):	Not applicable (N/A) *
Autoignition temperature:	790 °F
Lower flammability limit:	Not applicable (N/A) *
Upper flammability limit:	Not applicable (N/A) *

Particle characteristics:

Median equivalent diameter:	Non-applicable
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9.2 Other information:

Information with regard to physical hazard classes:

Explosive properties:	Not applicable (N/A) *
Oxidising properties:	Not applicable (N/A) *
Corrosive to metals:	Not applicable (N/A) *
Heat of combustion:	Not applicable (N/A) *
Aerosols-total percentage (by mass) of flammable components:	Not applicable (N/A) *

Other safety characteristics:

Surface tension at 68 °F:	Not applicable (N/A) *
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*Not relevant due to the nature of the product, not providing information property of its hazards.

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)

Refraction index: Not applicable (N/A) *

*Not relevant due to the nature of the product, not providing information property of its hazards.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity:

No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7 from Safety Data Sheet.

10.2 Chemical stability:

Chemically stable under the indicated conditions of storage, handling and use.

10.3 Possibility of hazardous reactions:

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

10.4 Conditions to avoid:

Applicable for handling and storage at room temperature:

Shock and friction	Contact with air	Increase in temperature	Sunlight	Humidity
Not applicable	Not applicable	Precaution	Precaution	Not applicable

10.5 Incompatible materials:

Acids	Water	Oxidising materials	Combustible materials	Others
Avoid strong acids	Not applicable	Avoid direct impact	Not applicable	Avoid alkalis or strong bases

10.6 Hazardous decomposition products:

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO₂), carbon monoxide and other organic compounds.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:

The experimental information related to the toxicological properties of the product itself is not available

Dangerous health implications:

In case of exposure that is repetitive, prolonged or at concentrations higher than recommended by the occupational exposure limits, it may result in adverse effects on health depending on the means of exposure:

A- Ingestion (acute effect):

- Acute toxicity: Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous for consumption. For more information see section 3.
- Corrosivity/Irritability: Based on available data, the classification criteria are not met. However, it does contain substances classified as hazardous for this effect. For more information see section 3.

B- Inhalation (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met. However, it contains substances classified as hazardous for inhalation. For more information see section 3.
- Corrosivity/Irritability: Based on available data, the classification criteria are not met. However, it does contain substances classified as hazardous for this effect. For more information see section 3.

C- Contact with the skin and the eyes (acute effect):

- Contact with the skin: Based on available data, the classification criteria are not met. However, it contains substances classified as hazardous for skin contact. For more information see section 3.
- Contact with the eyes: Based on available data, the classification criteria are not met. However, it does contain substances classified as hazardous for this effect. For more information see section 3.

D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):

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SECTION 11: TOXICOLOGICAL INFORMATION (continued)

- Carcinogenicity: Exposure to this product can cause cancer. For more specific information on the possible health effects see section 2.

IARC: 2,2'-iminodiethanol (2B); phenol (3)

- Mutagenicity: Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous with mutagenic effects. For more information see section 3.

- Reproductive toxicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

E- Sensitizing effects:

- Respiratory: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous with sensitising effects. For more information see section 3.

- Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

F- Specific target organ toxicity (STOT) - single exposure:

Based on available data, the classification criteria are not met. However, it contains substances classified as hazardous for inhalation. For more information see section 3.

G- Specific target organ toxicity (STOT)-repeated exposure:

- Specific target organ toxicity (STOT)-repeated exposure: Serious health effects in the case of prolonged consumption, including death, serious functional disorders or morphological changes of toxicological importance.

- Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

H- Aspiration hazard:

Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

Other information:

Not applicable (N/A)

Specific toxicology information on the substances:

Identification	Acute toxicity		Genus
1-deoxy-1-(methylamino)-D-glucitol 2-[2-methyl-3-(perfluoromethyl)anilino]nicotinate CAS: 42461-84-7	LD50 oral	157 mg/kg	Rat
	LD50 dermal	>5000 mg/kg	
	LC50 inhalation	3 mg/L (ATEi)	
phenol CAS: 108-95-2	LD50 oral	100 mg/kg	Rat
	LD50 dermal	630 mg/kg	Rabbit
	LC50 inhalation	3 mg/L (ATEi)	
2,2'-iminodiethanol CAS: 111-42-2	LD50 oral	710 mg/kg	Rat
	LD50 dermal	12200 mg/kg	Rabbit
	LC50 inhalation	>5 mg/L	

Acute Toxicity Estimate (ATE mix):

ATE mix		Ingredient(s) of unknown toxicity
Oral	2713.92 mg/kg (Calculation method)	0 %
Dermal	126000 mg/kg (Calculation method)	0 %
Inhalation	54.55 mg/L (4 h) (Calculation method)	0 %

SECTION 12: ECOLOGICAL INFORMATION

The experimental information related to the eco-toxicological properties of the product itself is not available

Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

12.1 Ecotoxicity (aquatic and terrestrial, where available):

Acute toxicity:

SECTION 12: ECOLOGICAL INFORMATION (continued)

Identification	Concentration		Species	Genus
1-deoxy-1-(methylamino)-D-glucitol 2-[2-methyl-3-(perfluoromethyl)anilino]nicotinate CAS: 42461-84-7	LC50	9.2 mg/L (96 h)	Salmo gairdneri	Fish
	EC50	25 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	78 mg/L (72 h)	N/A	Algae
phenol CAS: 108-95-2	LC50	14 mg/L (96 h)	Leuciscus idus	Fish
	EC50	12 mg/L (24 h)	Daphnia magna	Crustacean
	EC50	370 mg/L (96 h)	Chlorella vulgaris	Algae
2,2'-iminodiethanol CAS: 111-42-2	LC50	800 mg/L (24 h)	Carassius auratus	Fish
	EC50	180 mg/L (24 h)	Daphnia magna	Crustacean
	EC50	75 mg/L (72 h)	Scenedesmus subspicatus	Algae

Chronic toxicity:

Identification	Concentration		Species	Genus
phenol CAS: 108-95-2	NOEC	0.077 mg/L	Cirrhina mrigala	Fish
	NOEC	0.16 mg/L	Daphnia magna	Crustacean
2,2'-iminodiethanol CAS: 111-42-2	NOEC	1 mg/L	N/A	Fish
	NOEC	0.78 mg/L	Daphnia magna	Crustacean

12.2 Persistence and degradability:

Substance-specific information:

Identification	Degradability		Biodegradability	
phenol CAS: 108-95-2	BOD5	1.68 g O ₂ /g	Concentration	100 mg/L
	COD	2.33 g O ₂ /g	Period	14 days
	BOD5/COD	0.72	% Biodegradable	85 %
2,2'-iminodiethanol CAS: 111-42-2	BOD5	0.03 g O ₂ /g	Concentration	100 mg/L
	COD	1.52 g O ₂ /g	Period	21 days
	BOD5/COD	0.02	% Biodegradable	54 %

12.3 Bioaccumulative potential:

Substance-specific information:

Identification	Bioaccumulation potential	
phenol CAS: 108-95-2	BCF	17
	Pow Log	1.48
	Potential	Low
2,2'-iminodiethanol CAS: 111-42-2	BCF	1
	Pow Log	-1.43
	Potential	Low

12.4 Mobility in soil:

Identification	Absorption/desorption		Volatility	
phenol CAS: 108-95-2	Koc	50	Henry	2.2E-2 Pa·m ³ /mol
	Conclusion	Very High	Dry soil	Yes
	Surface tension	1.847E-2 N/m (447.82 °F)	Moist soil	Yes
2,2'-iminodiethanol CAS: 111-42-2	Koc	Not applicable (N/A)	Henry	Not applicable (N/A)
	Conclusion	Not applicable (N/A)	Dry soil	Not applicable (N/A)
	Surface tension	3.4E-2 N/m (299.21 °F)	Moist soil	Not applicable (N/A)

12.5 Results of PBT and vPvB assessment:

Non-applicable

12.6 Other adverse effects:

Not described

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Disposal methods:

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SECTION 13: DISPOSAL CONSIDERATIONS (continued)

IT IS THE RESPONSIBILITY OF THE WASTE GENERATOR TO EVALUATE WHETHER HIS WASTES ARE HAZARDOUS BY CHARACTERISTICS OR LISTING.

Waste management (disposal and evaluation):

Follow RCRA framework and EPA regulation for to ensure that hazardous waste is managed safely and properly. Waste should not be disposed of to drains. Remind, It is the responsibility of the waste generator to evaluate whether his wastes are hazardous by characteristics or listing. See section 6 for further information about Accidental release measures.

Regulations related to waste management:

Legislation related to waste management:

40 CFR Solid Wastes - Part 239 through 282.

State regulatory requirements for generators may be more stringent than those in the federal program. Be sure to check the state's policies.

SECTION 14: TRANSPORT INFORMATION

This product is not regulated for transport.

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations specific for the product in question:

- CALIFORNIA LABOR CODE - The Hazardous Substances List: *phenol (108-95-2)*; *2,2'-iminodiethanol (111-42-2)*
- California Proposition 65 (the Safe Drinking Water and Toxic Enforcement Act of 1986) - Birth defects or other reproductive harm: Not applicable (N/A)
- California Proposition 65 (the Safe Drinking Water and Toxic Enforcement Act of 1986) - Cancer: *2,2'-iminodiethanol (111-42-2)*
- CANADA-Domestic Substances List (DSL): *phenol (108-95-2)*; *2,2'-iminodiethanol (111-42-2)*
- CANADA-Non-Domestic Substances List (NDSL): Not applicable (N/A)
- Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) - Reportable Quantities: *phenol (108-95-2)* - *U188*; *2,2'-iminodiethanol (111-42-2)* - *100 lb*
- Hazardous Air Pollutants (Clean Air Act): *phenol (108-95-2)*; *2,2'-iminodiethanol (111-42-2)*
- Massachusetts RTK - Substance List: *phenol (108-95-2)*; *2,2'-iminodiethanol (111-42-2)*
- Minnesota - Hazardous substances ERTK: *phenol (108-95-2)*; *2,2'-iminodiethanol (111-42-2)*
- New Jersey Worker and Community Right-to-Know Act: *phenol (108-95-2)*; *2,2'-iminodiethanol (111-42-2)*
- New York RTK - Substance list: *phenol (108-95-2)*; *2,2'-iminodiethanol (111-42-2)*
- NTP (National Toxicology Program): Not applicable (N/A)
- OSHA Specifically Regulated Substances (29 CFR 1910.1001-1096): Not applicable (N/A)
- Pennsylvania Worker and Community Right-to-Know Law: *phenol (108-95-2)*; *2,2'-iminodiethanol (111-42-2)*
- Rhode Island - Hazardous substances RTK: *phenol (108-95-2)*; *2,2'-iminodiethanol (111-42-2)*
- The Toxic Substances Control Act (TSCA) : *phenol (108-95-2)*; *2,2'-iminodiethanol (111-42-2)*
- Toxic chemical release reporting under EPCRA section 313 (40 CFR Part 372): *phenol (108-95-2)*; *2,2'-iminodiethanol (111-42-2)*

Specific provisions in terms of protecting people or the environment:

It is recommended to use the information included in this safety data sheet as data used in a risk evaluation of the local circumstances in order to establish the necessary risk prevention measures for the manipulation, use, storage and disposal of this product.

Other legislation:

Take into consideration other applicable federal, state, and local laws and local regulations.

SECTION 16: OTHER INFORMATION

Legislation related to safety data sheets:

This safety data sheet has been designed in accordance with Appendix d to §1910.1200 - Safety data sheets

Texts of the legislative phrases mentioned in section 2:

H372: Causes damage to organs through prolonged or repeated exposure.

H351: Suspected of causing cancer.

Texts of the legislative phrases mentioned in section 3:

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

29 CFR 1910.1200:

- CONTINUED ON NEXT PAGE -

SECTION 16: OTHER INFORMATION (continued)

Acute Tox. 3: H301+H311+H331 - Toxic if swallowed, in contact with skin or if inhaled.
Acute Tox. 3: H301+H331 - Toxic if swallowed or if inhaled.
Acute Tox. 4: H302 - Harmful if swallowed.
Carc. 2: H351 - Suspected of causing cancer.
Eye Dam. 1: H318 - Causes serious eye damage.
Eye Irrit. 2A: H319 - Causes serious eye irritation.
Flam. Liq. 4: H227 - Combustible liquid.
Muta. 2: H341 - Suspected of causing genetic defects.
Skin Corr. 1B: H314 - Causes severe skin burns and eye damage.
Skin Irrit. 2: H315 - Causes skin irritation.
STOT RE 1: H372 - Causes damage to organs through prolonged or repeated exposure.
STOT RE 2: H373 - May cause damage to organs through prolonged or repeated exposure.
STOT SE 3: H335 - May cause respiratory irritation.

Advice related to training:

Minimal training is recommended to prevent industrial risks for staff using this product, in order to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

Principal bibliographical sources:

Occupational Safety & Health Administration (OSHA).

Abbreviations and acronyms:

IMDG: International maritime dangerous goods code
IATA: International Air Transport Association
ICAO: International Civil Aviation Organisation
COD: Chemical Oxygen Demand
BOD5: 5-day biochemical oxygen demand
BCF: Bioconcentration factor
LD50: Lethal Dose 50
CL50: Lethal Concentration 50
EC50: Effective concentration 50
Log-POW: Octanol-water partition coefficient
Koc: Partition coefficient of organic carbon
IARC: International Agency for Research on Cancer

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END OF SAFETY DATA SHEET