



SILVER FERN
CHEMICAL INC

SAFETY DATA SHEET

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name: NP-12

Distributor

Silver Fern Chemical, Inc.
2226 Queen Anne Avenue North, Suite C
Seattle WA 98109, USA
Phone: 1-866-282-3384

Business Contact

Customer Service: 1-866-282-3384
info@silverfernchemical.com

Emergency phone number

24 Hour Emergency Contact
Infotrac 1-800-535-5053 (USA & Canada)
Outside USA & Canada 1-352-323-3500

Material Uses: Surfactant

SECTION 2: HAZARD IDENTIFICATION

OSHA/HCS Status:

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

2.1 Classification of the product:

SERIOUS EYE DAMAGE/EYE IRRITATION – Category 1
AQUATIC HAZARD (LONG-TERM) – Category 3

2.2 GHS Label elements:

Pictogram:



Signal Word: Danger

Hazard Statement(s):

Causes serious eye damage
Harmful to aquatic life with long lasting effects

Precautionary Statement(s):

Wear eye/face protection.
Avoid release to the environment.
Wash hands thoroughly after handling.
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 or physician.
Dispose of contents and container in accordance with all local, regional, national and international regulations.

2.3 Other hazards which do not result in classification:

None known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance/mixture:

Mixture

<u>Chemical Name</u>	<u>CAS Number</u>	<u>%</u>
Nonylphenol, ethoxylated	127087-87-0	60 – 100

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.

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SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures:

Eye Contact: Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated by a physician.

Inhalation: Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin Contact: Get medical attention immediately. Call a poison center or physician. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion: Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

4.2 Most important symptoms and effects, acute:

Eye Contact: Causes serious eye damage.

Inhalation: May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system.

Skin Contact: No known significant effects of critical hazards.

Ingestion: May cause burns to mouth, throat and stomach.

4.3 Most important symptoms and effects, over-exposure:

Eye Contact: Adverse symptoms may include the following:

- Pain
- Watering
- Redness

Inhalation: No specific data.

Skin Contact: Adverse symptoms may include the following:

- Pain or irritation
- Redness
- Blistering may occur

Ingestion: Adverse symptoms may include the following:

- Stomach pains

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

Notes to physician: No specific treatment: Treat symptomatically. Call medical doctor or poison control center immediately if large quantities have been ingested.

Protection of first-aiders: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

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SECTION 5: FIRE-FIGHTING MEASURES

5.1 Flash point:

Closed cup: 204.44°C (400°F)

5.2 Extinguishing media:

Suitable extinguishing media:

Us an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media:

None known.

5.3 Special hazards arising from the substance or mixture:

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

5.4 Hazardous thermal decomposition products:

Decomposition products may include the following materials:

Carbon dioxide
Carbon monoxide

5.5 Special protective actions for fire-fighters:

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.

5.6 Protective equipment for fire-fighting:

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:

For non-emergency personnel: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

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.

Methods and material 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). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling:

Protective measures: Put on appropriate personal protective equipment (see Section 8). Do not get in eyes, or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

7.2 Advise on general occupational hygiene:

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information and hygiene measures.

7.3 Conditions for safe storage, including any incompatibilities:

Store in accordance with local regulations Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters:

Appropriate engineering controls: If user operations generate dust, fumes, gas vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

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.

8.2 Individual protection measures:

Hygiene measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

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, gasses or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

Hand protection: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Thermal hazards: Not available.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:	
Form:	Liquid
Color:	Clear colorless
Odor:	Slight
Odor threshold:	Not available
pH:	7
Melting point/freezing point:	Not available
Boiling/condensation point:	Not available
Flash point:	Closed cup: 204.44°C (400°F)
Evaporation rate:	Not available
Flammability (solid, gas):	Not available
Lower and Upper explosive (flammable) limits:	Not available
Vapor pressure:	<0.13 kPa (<1 mm Hg) [room temperature]
Vapor density:	>1 [Air = 1]
Relative density:	1.07
Solubility in water:	Not available
Partition coefficient: n-octanol/water:	Not available
Auto-ignition temperature:	Not available
Decomposition temperature:	Not available
Viscosity	Kinematic (room temperature): 1.2 cm ² /s (120 cSt)

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.

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SECTION 10: STABILITY AND REACTIVITY (CONTINUED)

10.4 Conditions to avoid:

No specific data.

10.5 Incompatible materials:

No specific data.

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:

Product/ingredient name	Test	Endpoint	Species	Result
Nonylphenol, ethoxylated	-	LD50 Dermal	Rabbit – Male, Female	>3000 mg/kg
		LD50 Oral	Rat – Male, Female	3890 mg/kg

Irritation/corrosion:

Not available.

Sensitization:

Not available.

Mutagenicity:

Product/ingredient name	Test	Result
Nonylphenol, ethoxylated	Experiment: In vitro Subject: bacteria Metabolic activation: +/-	Negative
	Experiment: In vitro Subject: Mammalian-Animal	Negative
	Experiment: In vitro Subject: Mammalian-Animal Cell: Somatic	Negative

Carcinogenicity:

Not available.

Reproductive toxicity:

Not available.

Teratogenicity:

Not available.

Specific target organ toxicity (single exposure):

Not available.

Specific target organ toxicity (repeated exposure):

Not available.

Aspiration hazard:

Not available.

Information on the likely routes of exposure:

Not available.

Potential acute health effects:

Eye contact: Causes serious eye damage.

Inhalation: May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system.

Skin contact: No known significant effects of critical hazards.

Ingestion: May cause burns to mouth, throat and stomach.

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SECTION 11: TOXICOLOGICAL INFORMATION (CONTINUED)

11.1 Information on toxicological effects: (continued)

Symptoms related to the physical, chemical and toxicological characteristics:

Eye contact: Adverse symptoms may include the following:

Pain
Watering
Redness

Inhalation: No specific data.

Skin contact: Adverse symptoms may include the following:

Pain or irritation
Redness
Blistering may occur

Ingestion: Adverse symptoms may include the following:

Stomach pains

Delayed and immediate effects and also chronic effects from short and long term exposure:

Short term exposure:

Potential immediate effects: Not available

Potential delayed effects: Not available

Long term exposure:

Potential immediate effects: Not available

Potential delayed effects: Not available

Potential chronic health effects:

General: No known significant effects or critical hazards.

Carcinogenicity: No known significant effects or critical hazards.

Mutagenicity: No known significant effects or critical hazards.

Teratogenicity: No known significant effects or critical hazards.

Developmental Effects: No known significant effects or critical hazards.

Fertility effects: No known significant effects or critical hazards.

Numerical measures of toxicity:

Acute toxicity estimates:

Route	ATE value
Oral	3978.1 mg/kg

Other information: Not available.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity:

Product/ingredient name	Test	Endpoint	Exposure	Species	Result
Nonylphenol, ethoxylated	-	Acute LC50	48 hours	Daphnia	89.5 mg/l
	-	Acute LC50	96 hours	Fish	18 mg/l

Persistence and degradability:

Conclusion/Summary:

Product/ingredient name	Test	Period	Result
Nonylphenol, ethoxylated	-	28 days	30 %

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Nonylphenol, ethoxylated	-	-	Not readily

Bioaccumulative potential:

Not available.

Mobility in soil:

Not available.

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SECTION 12: ECOLOGICAL INFORMATION (CONTINUED)

12.1 Toxicity: (continued)

Other adverse effects: No known significant effects or critical hazards.

Other ecological information:

BOD5 Not determined.
COD Not determined.
TOC Not determined.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Disposal methods:

The generation of waste should be avoided or minimized whenever 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.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

SECTION 14: TRANSPORT INFORMATION

Proper shipping name:

DOT: Not regulated

TDG: Not regulated

IMDG: Not regulated

IATA: Not regulated

Regulatory information	UN number	Classes	PG*	Label	Additional information
DOT Classification	Not regulated	-	-		-
TDG Classification	Not regulated	-	-		-
IMDG Classification	Not regulated	-	-		-
IATA Classification	Not regulated	-	-		-

PG*: Packing group

SECTION 15: REGULATORY INFORMATION

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

United States Regulations

TSCA 8(b) Inventory: All components are listed or exempted.

TSCA 5(a)2 final significant new use rule (SNUR): No ingredients listed.

TSCA 5(e) substance consent order: No ingredients listed.

TSCA 12(b) export notification: No ingredients listed.

SARA 311/312: Immediate (acute) health hazard.

Clean Air Act – Ozone Depleting Substances (ODS): This product does not contain nor is it manufactured with ozone depleting substances.

SARA 313 Form R – Reporting requirements:

<u>Product name</u>	<u>Concentration %</u>
Glycol ethers (Fraction of product meeting EPA definition)	1 – 2.786

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SECTION 15: REGULATORY INFORMATION (CONTINUED)

15.1 Safety, Health and Environmental Regulations Specific for the Product: (continued)

CERCLA Hazardous substances:

<u>Ingredient Name</u>	<u>%</u>	<u>Section 304 CERCLA Hazardous Substance</u>	<u>CERCLA Reportable Quantity (Lbs)</u>	<u>Product Reportable Quantity (Lbs)</u>
Acetic acid	0.01	Listed	5000	50000000
1,4-Dioxane	0.003	Listed	100	3333333
Ethylene Oxide	0.001	Listed		

15.2 State Regulations:

Pennsylvania – RTK: No ingredients listed.

California Prop 65: **WARNING:** This product contains less than 0.1% of a chemical known to the State of California to cause cancer.
WARNING: This product contains less than 1% of a chemical known to the State of California to cause birth defects or other reproductive harm.

<u>Ingredient Name</u>	<u>Cancer</u>	<u>Reproductive</u>
1,4-Dioxane	Yes	No
Ethylene oxide	Yes	Yes

15.3 Canadian Regulations:

CEPA DSL: All components are listed or exempted.

WHMIS Classes: Class D-2B: Material causing other toxic effects (Toxic).

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

15.4 Brazil Regulations:

Classification system used: Norma ABNT-NBR 14725-2:2012

International Lists:

Australia inventory (AICS): All components are listed or exempted.

China inventory (IECSC): All components are listed or exempted.

Japan inventory: All components are listed or exempted.

Korea inventory: All components are listed or exempted.

Malaysia inventory (EHS Register): Not determined

New Zealand inventory of Chemicals (NZIoC): All components are listed or exempted.

Philippines inventory (PICCS): All components are listed or exempted.

Taiwan inventory (CSNN): Not determined.

SECTION 16: OTHER INFORMATION

Revision Date

June 1, 2015

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

Health	2
Flammability	1
Physical hazards	0
Personal protection	

The customer is responsible for determining the PPE code for this material.

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on SDS's under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

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SECTION 16: OTHER INFORMATION (CONTINUED)

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



DISCLAIMER OF RESPONSIBILITY

The information on this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, expressed or implied, regarding its correctness. Some information presented and conclusions drawn herein are from sources other than direct test data on the substance itself. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage, or expense arising out of or in any way connected with handling, storage, use, or disposal of this product. If the product is used as a component in another product, this SDS information may not be applicable.

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