

SAFETY DATA SHEET

BJ0112 PETRO COOLING SYS CON PRI112_12CS

Version 2.1

Revision Date 10/01/2023

Print Date 04/27/2025

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name : BJ0112 PETRO COOLING SYS CON PRI112_12CS

Material number : 000000000500100112

Manufacturer or supplier's details

Company : Zep Inc.

Address : 350 Joe Frank Harris Parkway, SE
Emerson, GA 30137

Telephone : Compliance Services - 877-428-9937

Emergency telephone numbers

For SDS Information : Compliance Services - 877-428-9937

For a Medical Emergency : 877-541-2016 Toll Free - All Calls Recorded

For a Transportation
Emergency : CHEMTREC: 800-424-9300 - All Calls Recorded.
In the District of Columbia 202-483-7616

Recommended use of the chemical and restrictions on use

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance	liquid
Colour	colourless
Odour	mild

GHS Classification

Eye irritation : Category 2A

Skin sensitisation : Category 1

Carcinogenicity : Category 2

Specific target organ toxicity -
repeated exposure (Oral) : Category 2

GHS label elements

Hazard pictograms :



Signal word : Warning

Hazard statements : H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H351 Suspected of causing cancer.
H373 May cause damage to organs through prolonged or
repeated exposure if swallowed.

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Precautionary statements : **Prevention:**
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 skin thoroughly after handling.
P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
Response:
P302 + P352 IF ON SKIN: Wash with plenty of water.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
P337 + P313 If eye irritation persists: Get medical advice/ attention.
P363 Wash contaminated clothing before reuse.
Disposal:
P501 Dispose of contents/container in accordance with local regulation.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

Chemical name	CAS-No.	Concentration [%]
propane-1,2-diol	57-55-6	≥ 10 - < 20
2,2'-iminodiethanol	111-42-2	≥ 1 - < 3
sodium benzothiazol-2-yl sulphide	2492-26-4	≥ 0.1 - < 1

The exact percentages of disclosed substances are withheld as trade secrets.

SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area.
Show this safety data sheet to the doctor in attendance.
Do not leave the victim unattended.

If inhaled : If unconscious, place in recovery position and seek medical advice.
If symptoms persist, call a physician.

In case of skin contact : If skin irritation persists, call a physician.
Wash off immediately with plenty of water for at least 15 minutes.

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	If on clothes, remove clothes.
In case of eye contact	: Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist. Immediately flush eyes for at least 15 minutes. Get medical attention.
If swallowed	: Keep respiratory tract clear. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Take victim immediately to hospital.
Most important symptoms and effects, both acute and delayed	: Effects are immediate and delayed. Symptoms may include irritation, redness, pain, and rash. Chronic effects are delayed and symptoms may not be observed during an exposure. Symptoms may differ depending on organs and systems affected. These effects generally are reflected in reduced function or change, which may include cramping, swelling, respiratory issues, and general pain. Effects are dependent on exposure (dose, concentration, contact time). May cause an allergic skin reaction. Causes serious eye irritation. Suspected of causing cancer. May cause damage to organs through prolonged or repeated exposure if swallowed. Review section 2 of SDS to see all potential hazards.
Notes to physician	: Treat symptomatically. Symptoms may be delayed.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	: Water spray jet Alcohol-resistant foam Carbon dioxide (CO2) Dry chemical
Unsuitable extinguishing media	: High volume water jet
Specific hazards during firefighting	: Do not allow run-off from fire fighting to enter drains or water courses.
Hazardous combustion products	: Carbon dioxide (CO2) Carbon monoxide Smoke Nitrogen oxides (NOx)
Specific extinguishing methods	: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

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- Further information : Standard procedure for chemical fires.
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.
Ensure adequate ventilation.
Evacuate personnel to safe areas.
- Environmental precautions : Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains, inform respective authorities.
- Methods and materials for containment and cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

- Advice on safe handling : Avoid exposure - obtain special instructions before use.
Avoid contact with skin and eyes.
For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
Dispose of rinse water in accordance with local and national regulations.
Do not breathe vapours or spray mist.
Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.
- Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated place.
Observe label precautions.
Electrical installations / working materials must comply with the technological safety standards.
- Materials to avoid : Strong oxidizing agents
Do not store near acids.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of	Control parameters /	Basis
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		exposure)	Permissible concentration	
propane-1,2-diol	57-55-6	TWA	10 mg/m3	US WEEL
2,2'-iminodiethanol	111-42-2	TWA (Inhalable fraction and vapor)	1 mg/m3	ACGIH
		TWA	3 ppm 15 mg/m3	NIOSH REL
		TWA	3 ppm 15 mg/m3	OSHA P0
		PEL	0.46 ppm 2 mg/m3	CAL PEL

Engineering measures : effective ventilation in all processing areas

Personal protective equipment

Respiratory protection : Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.

Hand protection

Material

Remarks

: Protective gloves

: The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection

: Tightly fitting safety goggles

Wear face-shield and protective suit for abnormal processing problems.

Ensure that eyewash stations and safety showers are close to the workstation location.

Skin and body protection

: Impervious clothing

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures

: When using do not eat or drink.

When using do not smoke.

Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

: liquid

Colour

: colourless

Odour

: mild

Odour Threshold

: No data available

pH

: 9.5 - 10.5

Melting point/freezing point

: No data available

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Boiling point	: 100 °C
Flash point	: > 93.33 °C Method: TCC
Evaporation rate	: No data available
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: No data available
Density	: 1 g/cm3
Solubility(ies)	
Water solubility	: partly soluble
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: not determined
Thermal decomposition	: No data available
Viscosity	
Viscosity, kinematic	: No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: Stable
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: No decomposition if stored and applied as directed.
Conditions to avoid	: Extremes of temperature and direct sunlight.
Incompatible materials	: Acids Strong oxidizing agents
Hazardous decomposition products	: Nitrogen oxides (NOx) Carbon oxides

SECTION 11. TOXICOLOGICAL INFORMATION

Potential Health Effects

Aggravated Medical Condition	: None known.
Symptoms of Overexposure	: Effects are immediate and delayed. Symptoms may include irritation, redness, pain, and rash.

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Chronic effects are delayed and symptoms may not be observed during an exposure.
Symptoms may differ depending on organs and systems affected. These effects generally are reflected in reduced function or change, which may include cramping, swelling, respiratory issues, and general pain.
Effects are dependent on exposure (dose, concentration, contact time).
May cause an allergic skin reaction.
Causes serious eye irritation.
Suspected of causing cancer.
May cause damage to organs through prolonged or repeated exposure if swallowed.
Review section 2 of SDS to see all potential hazards.
Treat symptomatically. Symptoms may be delayed.

Carcinogenicity:

IARC	Group 2B: Possibly carcinogenic to humans	
	2,2'-iminodiethanol	111-42-2
ACGIH	Confirmed animal carcinogen with unknown relevance to humans	
	2,2'-iminodiethanol	111-42-2
OSHA	No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.	
NTP	No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.	

Acute toxicity

Product:

Acute oral toxicity : Acute toxicity estimate : > 5,000 mg/kg
Method: Calculation method

Components:

sodium benzothiazol-2-yl sulphide:

Acute oral toxicity : LD50 Oral Rat: 5,200 mg/kg

Acute dermal toxicity : LD50 Dermal Rabbit: 5,010 mg/kg

Skin corrosion/irritation

Product:

Remarks: May cause skin irritation and/or dermatitis.

Serious eye damage/eye irritation

Product:

Remarks: Severe eye irritation

Respiratory or skin sensitisation

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Product:

Remarks: Causes sensitisation.

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

STOT - single exposure

No data available

STOT - repeated exposure

No data available

Aspiration toxicity

No data available

Further information

Product:

Remarks: No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

No data available

Persistence and degradability

No data available

Bioaccumulative potential

Product:

Partition coefficient: n-octanol/water : Remarks: No data available

Components:

propane-1,2-diol :

Partition coefficient: n-octanol/water : log Pow: -1.07

2,2'-iminodiethanol :

Partition coefficient: n-octanol/water : Pow: 1.43

Mobility in soil

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No data available

Other adverse effects

No data available

Product:

Regulation 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances

Remarks This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

Additional ecological information : No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Do not dispose of waste into sewer.
Do not contaminate ponds, waterways or ditches with chemical or used container.
Dispose of in accordance with local regulations.

Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION

Transportation Regulation: 49 CFR (USA):
NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

Transportation Regulation: IMDG (Vessel):
NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

Transportation Regulation: IATA (Cargo Air):
NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

Transportation Regulation: IATA (Passenger Air):
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Transportation Regulation: TDG (Canada):
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The product as delivered to the customer conforms to packaging requirements for shipment by road under US Department of Transportation (DOT) regulations. Additional transportation classifications noted above are for reference only, and not a certification or warranty of the suitability of the packaging for shipment under these alternative transport regulations.

SECTION 15. REGULATORY INFORMATION

TSCA list : No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
2,2'-iminodiethanol	111-42-2	100	*

*: Calculated RQ exceeds reasonably attainable upper limit.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : Serious eye damage or eye irritation
Carcinogenicity
Specific target organ toxicity (single or repeated exposure)
Respiratory or skin sensitisation

SARA 302 : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 : The following components are subject to reporting levels established by SARA Title III, Section 313:
2,2'-iminodiethanol 111-42-2 1.5193 %

California Prop. 65



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.

The components of this product are reported in the following inventories:

DSL All components of this product are on the Canadian DSL
TSCA On TSCA Inventory

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For information on the country notification status for other regions please contact the manufacturer's regulatory group.

Inventory Acronym and Validity Area Legend:

TSCA (USA), DSL (Canada), NDSL (Canada)

SECTION 16. OTHER INFORMATION

Further information

NFPA:

HEALTH	2
FLAMMABILITY	1
INSTABILITY	0
SPECIAL HAZARD.	

0 = not significant, 1 =Slight,
2 = Moderate, 3 = High
4 = Extreme

HMIS III:

HEALTH	2*
FLAMMABILITY	1
PHYSICAL HAZARD	0

0 = not significant, 1 =Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

OSHA - GHS Label Information:

Hazard pictograms



Signal word

: **Warning:**

Hazard statements

: May cause an allergic skin reaction. Causes serious eye irritation. Suspected of causing

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Precautionary statements

cancer. May cause damage to organs through prolonged or repeated exposure if swallowed.

Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust/ fume/ gas/ mist/ vapours/ spray. Wash skin thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response: IF ON SKIN: Wash with plenty of water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF exposed or concerned: Get medical advice/ attention. If skin irritation or rash occurs: Get medical advice/ attention. If eye irritation persists: Get medical advice/ attention. Wash contaminated clothing before reuse.

Disposal: Dispose of contents/container in accordance with local regulation.

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