

## Section 1. Identification

**Product name** Techniclean XHP  
**SDS #** 468791  
**Code** 468791-US03

### Relevant identified uses of the substance or mixture and uses advised against

**Product use** Cleaner.  
For specific application advice see appropriate Technical Data Sheet or consult our company representative.

**Supplier** BP Lubricants USA Inc.  
1500 Valley Road  
Wayne, NJ 07470  
Telephone: +1-888-CASTROL

**EMERGENCY HEALTH INFORMATION:** +1-800-447-8735

**EMERGENCY SPILL INFORMATION:** +1-800-424-9300 (CHEMTREC USA)  
+1-703-527-3887 (CHEMTREC outside the US)

## Section 2. Hazards identification

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

**Classification of the substance or mixture** SKIN IRRITATION - Category 2  
EYE IRRITATION - Category 2A

### GHS label elements

#### Hazard pictograms



**Signal word** Warning

**Hazard statements** Causes skin irritation.  
Causes serious eye irritation.

### Precautionary statements

**Prevention** Wear protective gloves. Wear eye or face protection. Wash hands thoroughly after handling.

**Response** Take off contaminated clothing and wash it before reuse. IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical attention. 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 attention.

**Storage** Not applicable.

**Disposal** Not applicable.

**Hazards not otherwise classified** Defatting to the skin.

This product contains complex ionic mixtures within the fluid matrix which are an intrinsic part of the product and cannot be separated from the fluid matrix. Toxicology testing has shown the ionic-mixture containing products exhibit skin and eye irritation properties that are notably attenuated when compared to the individual acid and base components.

This product contains less than 5.5% 'free' boric acid. Based on toxicology and

## Section 2. Hazards identification

epidemiology studies, high doses of boric acid and borates have caused adverse effects on fertility and developmental toxicity in laboratory animals, but these effects were not seen in human studies (epidemiology and highly exposed workers studies). A Specific Concentration Limit (SCL) of 5.5% has been derived for boric acid and similar borate substances based upon a NOAEL of 9.6 mg boron/kg therefore mixtures containing boric acid or borates below 5.5% are not classified as reproductive hazards.

## Section 3. Composition/information on ingredients

**Substance/mixture** Mixture

Alkalis and additives in aqueous solution.

Ingredient name	%	CAS number
2,2',2''-nitrilotriethanol	≥10 - ≤25	102-71-6
Di-isopropanolamine	≥10 - ≤25	110-97-4
3,5,5-trimethylhexanoic acid	≤8.7	3302-10-1
Boric acid	≤6.8	10043-35-3
undecanedioic acid	≤3	1852-04-6
dodecanedioic acid	≤3	693-23-2

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

**There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health and hence require reporting in this section.**

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First aid measures

### Description of necessary first aid measures

#### Eye contact

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Check for and remove any contact lenses. Get medical attention.

#### Skin contact

In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention.

#### Inhalation

If inhaled, remove to fresh air. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. Get medical attention if symptoms occur.

#### Ingestion

Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Wash out mouth with water if person is conscious. Get medical attention if adverse health effects persist or are severe.

#### Protection of first-aiders

No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

### Most important symptoms/effects, acute and delayed

See Section 11 for more detailed information on health effects and symptoms.

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

#### Notes to physician

Treatment should in general be symptomatic and directed to relieving any effects. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

#### Specific treatments

No specific treatment.

## Section 5. Fire-fighting measures

### Extinguishing media

#### **Suitable extinguishing media**

In case of fire, use water fog, alcohol resistant foam, dry chemical or carbon dioxide extinguisher or spray.

#### **Unsuitable extinguishing media**

Do not use water jet.

#### **Specific hazards arising from the chemical**

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

#### **Hazardous combustion products**

Combustion products may include the following:  
carbon oxides (CO, CO<sub>2</sub>) (carbon monoxide, carbon dioxide)  
nitrogen oxides (NO, NO<sub>2</sub> etc.)

#### **Special protective actions for fire-fighters**

No action shall be taken involving any personal risk or without suitable training. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire.

#### **Special protective equipment for fire-fighters**

Fire-fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

#### **For non-emergency personnel**

Contact 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. Avoid breathing vapor or mist. Provide adequate ventilation. Put on appropriate personal protective equipment. Floors may be slippery; use care to avoid falling.

#### **For emergency responders**

Entry into a confined space or poorly ventilated area contaminated with vapor, mist or fume is extremely hazardous without the correct respiratory protective equipment and a safe system of work. Wear self-contained breathing apparatus. Wear a suitable chemical protective suit. Chemical resistant boots. 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).

### Methods and materials for containment and cleaning up

#### **Small spill**

Stop leak if without risk. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

#### **Large spill**

Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. 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. Contaminated absorbent material may pose the same hazard as the spilled product. Dispose of via a licensed waste disposal contractor.

## Section 7. Handling and storage

### 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. 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. Use only with adequate ventilation. Avoid contact of spilled material and runoff with soil and surface waterways.

#### **Advice on general occupational hygiene**

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Wash thoroughly after handling. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

## Section 7. Handling and storage

### 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. Keep container tightly closed and sealed until ready for use. Store and use only in equipment/containers designed for use with this product. 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. DO NOT ADD NITRITES TO THIS FLUID.

## Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits

Ingredient name	Exposure limits
2,2',2''-nitrilotriethanol	<b>ACGIH TLV (United States).</b> TWA: 5 mg/m <sup>3</sup> 8 hours. Issued/Revised: 9/1994
Di-isopropanolamine	None.
3,5,5-trimethylhexanoic acid	None.
Boric acid	<b>ACGIH TLV (United States).</b> STEL: 6 mg/m <sup>3</sup> 15 minutes. Issued/Revised: 1/2005 Form: Inhalable fraction TWA: 2 mg/m <sup>3</sup> 8 hours. Issued/Revised: 1/2005 Form: Inhalable fraction
undecanedioic acid	None.
dodecanedioic acid	None.

While specific OELs for certain components may be shown in this section, other components may be present in any mist, vapor or dust produced. Therefore, the specific OELs may not be applicable to the product as a whole and are provided for guidance only.

### Biological exposure indices

No exposure indices known.

### Appropriate engineering controls

All activities involving chemicals should be assessed for their risks to health, to ensure exposures are adequately controlled. Personal protective equipment should only be considered after other forms of control measures (e.g. engineering controls) have been suitably evaluated. Personal protective equipment should conform to appropriate standards, be suitable for use, be kept in good condition and properly maintained. Your supplier of personal protective equipment should be consulted for advice on selection and appropriate standards. For further information contact your national organisation for standards.

Provide exhaust ventilation or other engineering controls to keep the relevant airborne concentrations below their respective occupational exposure limits.

The final choice of protective equipment will depend upon a risk assessment. It is important to ensure that all items of personal protective equipment are compatible.

### 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.

### 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 glasses with side shields.

#### Skin protection

## Section 8. Exposure controls/personal protection

### Hand protection

Wear chemical resistant gloves. Recommended: Butyl gloves. The correct choice of protective gloves depends upon the chemicals being handled, the conditions of work and use, and the condition of the gloves (even the best chemically resistant glove will break down after repeated chemical exposures). Most gloves provide only a short time of protection before they must be discarded and replaced. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. Gloves should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.

### Body protection

Use of protective clothing is good industrial practice. 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. Cotton or polyester/cotton overalls will only provide protection against light superficial contamination that will not soak through to the skin. Overalls should be laundered on a regular basis. When the risk of skin exposure is high (e.g. when cleaning up spillages or if there is a risk of splashing) then chemical resistant aprons and/or impervious chemical suits and boots will be required.

### 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 with adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Recommended: half-face mask - inorganic gases/vapor filter (Type B) - particulate filter. The correct choice of respiratory protection depends upon the chemicals being handled, the conditions of work and use, and the condition of the respiratory equipment. Safety procedures should be developed for each intended application. Respiratory protection equipment should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.

## Section 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

### Appearance

#### Physical state

Liquid.

#### Color

Yellow. [Light]

#### Odor

Not available.

#### Odor threshold

Not available.

#### pH

8.3 [Conc. (% w/w): 3%]

#### Melting point/freezing point

Not available.

#### Boiling point, initial boiling point, and boiling range

Not available.

#### Flash point

Closed cup: >100°C (>212°F) [Estimated. Water content interferes with flash point determination.]

Water content interferes with flash point determination.

#### Evaporation rate

Not available.

#### Flammability

Not applicable. Based on - Physical state

#### Lower and upper explosion limit/flammability limit

Not available.

#### Vapor pressure

Ingredient name	Vapor Pressure at 20°C			Vapor pressure at 50°C		
	mm Hg	kPa	Method	mm Hg	kPa	Method

## Section 9. Physical and chemical properties

Water	23.8	3.2				
2,2',2''-nitritotriethanol	<0.01	<0.0013				
3,5,5-trimethylhexanoic acid	0	0				
Boric acid	0	0	EU A.4			
undecanedioic acid	<0.08	<0.011	OECD 104			

**Relative vapor density**

Not available.

**Density**

>1000 kg/m<sup>3</sup> (>1 g/cm<sup>3</sup>) at 15.6°C

**Solubility(ies)**

Not available.

**Partition coefficient: n-octanol/water**

Not applicable.

**Auto-ignition temperature**

Ingredient name	°C	°F	Method
2,2',2''-nitritotriethanol	324	615.2	
Di-isopropanolamine	374	705.2	

**Decomposition temperature**

Not available.

**Viscosity**

Not available.

**VOC**

86.3 g/l

**Particle characteristics**

**Median particle size**

Not applicable.

## Section 10. Stability and reactivity

**Reactivity**

No specific test data available for this product. Refer to Conditions to avoid and Incompatible materials for additional information.

**Chemical stability**

The product is stable.

**Possibility of hazardous reactions**

Under normal conditions of storage and use, hazardous reactions will not occur.  
Under normal conditions of storage and use, hazardous polymerization will not occur.

**Conditions to avoid**

Avoid excessive heat.

**Incompatible materials**

Reactive or incompatible with the following materials: oxidizing materials.  
Slightly reactive or incompatible with the following materials: acids.

**Hazardous decomposition products**

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

## Section 11. Toxicological information

**Information on toxicological effects**

**Classification**

Product/ingredient name	OSHA	IARC	NTP
2,2',2''-nitritotriethanol	-	3	-

*Descriptors:*

OSHA:  
+ - Potential occupational carcinogen

*IARC:*

1 - Carcinogenic to human.  
2A - Probable human carcinogen.  
2B - Possible carcinogen to human.  
3 - Not classifiable as a human carcinogen.  
4 - Probably not a human carcinogen.

*NTP:*

Proven - Known to be human carcinogens.  
Possible - Reasonably anticipated to be human carcinogens.

## Section 11. Toxicological information

### Information on the likely routes of exposure

Routes of entry anticipated: Dermal, Inhalation.

### Potential acute health effects

#### Eye contact

Causes serious eye irritation.

#### Skin contact

Causes skin irritation.

#### Inhalation

Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure. May cause irritation to eyes, nose and throat due to exposure to vapor, mists or fumes.

#### Ingestion

Irritating to mouth, throat and stomach.

### Symptoms related to the physical, chemical and toxicological characteristics

#### Eye contact

Adverse symptoms may include the following:  
pain or irritation  
watering  
redness

#### Skin contact

Adverse symptoms may include the following:  
irritation  
redness  
dryness  
cracking

#### Inhalation

No specific data.

#### Ingestion

No specific data.

### 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	6221.44 mg/kg

### Additional information

Alkanolamine: This product contains an alkanolamine. In all metalworking fluids containing amines, there is a potential for forming nitrosamines which are animal carcinogens. Therefore, no nitrites or related nitrosating agents should be added to such compositions.

## Section 12. Ecological information

### Toxicity

No testing has been performed by the manufacturer.

### Persistence and degradability

Expected to be biodegradable.

### Bioaccumulative potential

Not available.

### Mobility in soil

Soil/water partition  
coefficient ( $K_{oc}$ )

Not available.

Mobility

Liquid. Soluble in water.

### Other adverse effects




No known significant effects or critical hazards.

## Section 13. Disposal considerations

### Disposal methods

The generation of waste should be avoided or minimized wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. 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. 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.

## Section 14. Transport information

	DOT Classification	TDG Classification	IMDG	IATA
UN number	Not regulated.	UN3082	UN3082	UN3082
UN proper shipping name	-	Environmentally hazardous substance, liquid, n.o.s. (Poly quaternary ammonium chloride)	Environmentally hazardous substance, liquid, n.o.s.. Marine pollutant (Benzotriazole)	Environmentally hazardous substance, liquid, n.o.s. (Poly quaternary ammonium chloride)
Transport hazard class(es)	-	9 	9 	9 
Packing group	-	III	III	III
Environmental hazards	No.	Yes.	Yes.	Yes.



## Section 14. Transport information

<b>Additional information</b>	-	Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.43-2.45 (Class 9), 2.7 (Marine pollutant mark). Non-bulk packages of this product are not regulated as dangerous goods when transported by road or rail.	This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8. <b><u>Emergency schedules</u></b> F-A, S-F	This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8.
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**Special precautions for user** Not available.

**Transport in bulk according to IMO instruments** Not available.

## Section 15. Regulatory information

### U.S. Federal regulations

**United States inventory (TSCA 8b)**

All components are active or exempted.

**SARA 302/304**

**Composition/information on ingredients**

No products were found.

**SARA 311/312**

**Classification**

SKIN IRRITATION - Category 2  
EYE IRRITATION - Category 2A

**SARA 313**

**Form R - Reporting requirements**

This product does not contain any hazardous ingredients at or above regulated thresholds.

**Supplier notification**

This product does not contain any hazardous ingredients at or above regulated thresholds.

### **State regulations**

**Massachusetts**

The following components are listed: TRIETHANOLAMINE; DIISOPROPANOLAMINE

**New Jersey**

The following components are listed: TRIETHANOLAMINE; ETHANOL, 2,2',2"-NITRILOTRIS-; BORATE COMPOUNDS, Inorganic

**Pennsylvania**

The following components are listed: ETHANOL, 2,2',2"-NITRILOTRIS-; 2-PROPANOL, 1,1'-IMINOBIS-

**California Prop. 65**

**⚠ WARNING:** This product can expose you to chemicals including Diethanolamine, 1,4-Dioxane and bis(2-chloroethyl) ether, which are known to the State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

### **Other regulations**

**Australia inventory (AIIIC)**

All components are listed or exempted.

**Canada inventory**

All components are listed or exempted.

**China inventory (IECSC)**

All components are listed or exempted.

**Japan inventory (CSCL)**

All components are listed or exempted.

**Korea inventory (KECI)**

All components are listed or exempted.

**Philippines inventory (PICCS)**

All components are listed or exempted.

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**Format** US

**Language** ENGLISH

## Section 15. Regulatory information

Taiwan Chemical  
Substances Inventory  
(TCSI)

Not determined.

REACH Status

For the REACH status of this product please consult your company contact, as identified in Section 1.

## Section 16. Other information

[National Fire Protection Association \(U.S.A.\)](#)



### History

Date of issue/Date of revision 12/19/2023.

Date of previous issue 05/30/2022.

Prepared by Product Stewardship

### Key to abbreviations

ACGIH = American Conference of Industrial Hygienists  
ATE = Acute Toxicity Estimate  
BCF = Bioconcentration Factor  
CAS Number = Chemical Abstracts Service Registry Number  
GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
IATA = International Air Transport Association  
IBC = Intermediate Bulk Container  
IMDG = International Maritime Dangerous Goods  
LogPow = logarithm of the octanol/water partition coefficient  
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)  
OEL = Occupational Exposure Limit  
SDS = Safety Data Sheet  
STEL = Short term exposure limit  
TWA = Time weighted average  
UN = United Nations  
UN Number = United Nations Number, a four digit number assigned by the United Nations Committee of Experts on the Transport of Dangerous Goods.  
Varies = may contain one or more of the following 64741-88-4, 64741-89-5, 64741-95-3, 64741-96-4, 64742-01-4, 64742-44-5, 64742-45-6, 64742-52-5, 64742-53-6, 64742-54-7, 64742-55-8, 64742-56-9, 64742-57-0, 64742-58-1, 64742-62-7, 64742-63-8, 64742-65-0, 64742-70-7, 72623-85-9, 72623-86-0, 72623-87-1

Indicates information that has changed from previously issued version.

### Notice to reader

All reasonably practicable steps have been taken to ensure this data sheet and the health, safety and environmental information contained in it is accurate as of the date specified below. No warranty or representation, express or implied is made as to the accuracy or completeness of the data and information in this data sheet.

The data and advice given apply when the product is sold for the stated application or applications. You should not use the product other than for the stated application or applications without seeking advice from BP Group.

It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. The BP Group shall not be responsible for any damage or injury resulting from use, other than the stated product use of the material, from any failure to adhere to recommendations, or from any hazards inherent in the nature of the material. Purchasers of the product for supply to a third party for use at work, have a duty to take all necessary steps to ensure that any person handling or using the product is provided with the information in this sheet. Employers have a duty to tell employees and others who may be affected of any hazards described in this sheet and of any precautions that should be taken. You can contact the BP Group to ensure that this document is the most current available. Alteration of this document is strictly prohibited.

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