SAFETY DATA SHEET



Section 1. Identification			
Product name	Rustilo 4175		
SDS #	458532		
Historic SDS #:	09027		
Code	458532-US03		
Relevant identified uses of th	ne substance or mixture and uses advised against		
Product use	Rust preventive 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 Product Information: +1-877-641-1600		
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 not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).	
Classification of the substance or mixture	Not classified.	
GHS label elements		
Signal word	No signal word.	
Hazard statements	No known significant effects or critical hazards.	
Precautionary statements		
Prevention	Not applicable.	
Response	Not applicable.	
Storage	Not applicable.	
Disposal	Not applicable.	
Hazards not otherwise classified	Defatting to the skin.	

Section 3. Composition/information on ingredients

Substance/mixture

Mixture

Corrosion inhibitors and additives in aqueous solution.

Ingredient name	CAS number	%
2,2',2"-nitrilotriethanol	102-71-6	≤10
Boric acid	10043-35-3	≤3

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

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Section 3. Composition/information on ingredients

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	Wash skin thoroughly with soap and water or use recognized skin cleanser. Remove contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention if symptoms occur.
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. Wash out mouth with water if person is conscious. Get medical attention if symptoms occur.
Protection of first-aiders	No action shall be taken involving any personal risk or without suitable training.

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: phosphorus oxides carbon oxides (CO, CO₂) (carbon monoxide, carbon dioxide) nitrogen oxides (NO, NO₂ etc.)
Special protective actions for fire-fighters Special protective equipment 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. 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	No action shall be taken involving any personal risk or without suitable training.				
personnel	Evacuate surrounding areas. Keep unnecessary and unprotected personnel from				
	entering. Do not touch or walk through spilled material. Put on appropriate personal				
	protective equipment. Floors may be slippery; use care to avoid falling.				

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Section 6. Accidental release measures

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".
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).
ainment and cleaning up
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.
Stop leak if without risk. Move containers from spill area. 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. 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). Avoid breathing vapor or mist. Avoid contact of spilled material and runoff with soil and surface waterways. Avoid prolonged or repeated contact with skin. During metal working, solid particles from workpieces or tools will contaminate the fluid and may cause abrasions of the skin. Where such abrasions result in a penetration of the skin, first aid treatment should be applied as soon as reasonably possible. The presence of certain metals in the workpiece or tool, such as chromium, cobalt and nickel, can contaminate the metalworking fluid and as a result may induce allergic skin reactions. Evaporation of water from soluble cutting fluids during use may lead to an increase in concentration which may result in the development of skin conditions due to irritation and defatting. It is important to monitor fluid strength on a regular basis with a refractometer and maintain it at the recommended concentration. Lubricants from other sources and other contaminants should be minimized. Swarf and other debris should be removed. To maintain optimum performance and minimize bacterial spoilage, machine tool coolant systems should be cleaned on a regular basis.
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.
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		re limits	
2,2',2"-nitrilotriethanol		ACGIH TLV (United States). TWA: 5 mg/m ³ 8 hours. Issued/Revised: 9/1994	
Boric acid ACGIH TLV (United States). STEL: 6 mg/m³ 15 minutes. Issue 1/2005 Form: Inhalable fraction TWA: 2 mg/m³ 8 hours. Issued/Re		s. Issued/Revised: tion	
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Section 8. Exposure controls/personal protection

1/2005 Form: Inhalable fraction

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.

Appropriate engineering controls	All activities involving cher exposures are adequately considered after other forr suitably evaluated. Person standards, be suitable for Your supplier of personal selection and appropriate organisation for standards Provide exhaust ventilation concentrations below their The final choice of protect important to ensure that a	controlled. Personal proi ns of control measures (in nal protective equipment use, be kept in good con protective equipment sho standards. For further in n or other engineering co respective occupational ive equipment will depen	tective equipment sho e.g. engineering cont should conform to ap dition and properly m ould be consulted for formation contact you ontrols to keep the rel exposure limits. d upon a risk assession	ould only be rols) have been opropriate advice on ur national evant airborne ment. It is
Environmental exposure controls	Emissions from ventilation comply with the requireme fume scrubbers, filters or e necessary to reduce emiss	ents of environmental pro engineering modifications	tection legislation. In s to the process equip	some cases,
Individual protection measures				
Hygiene measures	Wash hands, forearms an eating, smoking and using Appropriate techniques sh Wash contaminated clothi showers are close to the v	the lavatory and at the e ould be used to remove ng before reusing. Ensu	end of the working pe potentially contamina	riod. ted clothing.
Eye/face protection	Undiluted fluid: Chemical Diluted fluid: Safety glasse			
Skin protection				
Hand protection	Wear suitable gloves. Un nitrile gloves. Diluted fluid: Wear protect Recommended: nitrile glov chemicals being handled, (even the best chemically exposures). Most gloves p discarded and replaced. E practices vary, safety proc Gloves should therefore b with a full assessment of t	ive gloves if prolonged o ves. The correct choice of the conditions of work ar resistant glove will break rovide only a short time Because specific work en edures should be develo e chosen in consultation he working conditions.	r repeated contact is of protective gloves d ad use, and the condi down after repeated of protection before the vironments and mate ped for each intende with the supplier/mar	likely. lepends upon the tion of the gloves chemical hey must be erial handling d application.
Body protection	Use of protective clothing Personal protective equipr performed and the risks in this product. Cotton or polyester/cotton contamination that will not regular basis. When the r if there is a risk of splashir suits and boots will be req	nent for the body should volved and should be ap overalls will only provide soak through to the skin isk of skin exposure is hi ng) then chemical resista	be selected based on proved by a specialis protection against lig . Overalls should be gh (e.g. when cleanir	t before handling th superficial laundered on a ng up spillages or
Other skin protection	Appropriate footwear and based on the task being p specialist before handling	erformed and the risks in		
Respiratory protection	In case of insufficient vent For protection against med "resistant to oil" (class R) of Depending on the level of (with HEPA filter) including or any powered, air-purifyi (for oil mists less than 125 Where organic vapours ar combination particulate an	al working fluids, respira or oil proof (class P) shou airborne contaminants, a g disposable (P- or R-ser ng respirator equipped w 5 mg/m3). e a potential hazard duri	tory protection that is uld be selected where an air-purifying, half-n ies) (for oil mists less vith hood or helmet ar ng metalworking oper	e appropriate. nask respirator than 50mg/m3), nd HEPA filter
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Section 8. Exposure controls/personal protection

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

<u>Appearance</u>	
Physical state	Liquid.
Color	Yellow. [Light]
Odor	Not available.
Odor threshold	Not available.
рH	9.1 [Conc. (% w/w): 5%]
Melting point	Not available.
Boiling point	Not available.
Flash point	Closed cup: >100°C (>212°F) [Estimated. Water content interferes with flash point determination.]
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable. Based on - Physical state
Lower and upper explosive (flammable) limits	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Density	>1000 kg/m³ (>1 g/cm³) at 15.6°C
Solubility	Soluble in water.
Partition coefficient: n- octanol/water	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.

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.

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Section 11. Toxicological information

Information on toxicological effects

Product/ingredient	name	OSHA	IARC	NTP	
2,2',2"-nitrilotriethan	ol	-	3	-	
Descriptors:	OSHA: + - Pote carcinog	ntial occupat gen	ional	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.
nformation on the like outes of exposure	ely	Routes	of entry an	ticipated: Dermal, Inhalation.	
Potential acute health	effects				
Eye contact		No knov	vn significa	int effects or critical hazards.	
Skin contact		No knov	vn significa	int effects or critical hazards.	
Inhalation				nposition products may cause a h ng exposure.	nealth hazard. Serious effects may
Ingestion		No knov	n significa	int effects or critical hazards.	
symptoms related to t	the phys	<u>ical, chem</u>	ical and to	oxicological characteristics	
Eye contact			ific data.		
Skin contact		Adverse irritation dryness cracking		s may include the following:	
Inhalation		No spec	ific data.		
Ingestion		No spec	ific data.		
		s and also	<u>chronic e</u>	ffects from short and long term	<u>n exposure</u>
Short term exposure Potential immediate effects		Not avai	lable.		
Potential delayed e		Not avai	lable.		
Long term exposure Potential immediate effects		Not avai	lable.		
Potential delayed et		Not avai	lable.		
Potential chronic hea	alth effec				
			•	int effects or critical hazards.	
General Consistent site			•	int effects or critical hazards.	
Carcinogenicity		No los		int effects or critical hazards.	
Carcinogenicity Mutagenicity			•		
Carcinogenicity Mutagenicity Teratogenicity	oto	No knov	vn significa	int effects or critical hazards.	
Carcinogenicity Mutagenicity	cts	No knov No knov	vn significa vn significa		
Carcinogenicity Mutagenicity Teratogenicity Developmental effe		No knov No knov No knov	vn significa vn significa	nt effects or critical hazards. Int effects or critical hazards.	

Route ATE value Øral 250027.02 mg/kg

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Section 11. Toxicological information

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 (Koc)	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. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Diluted Fluid The spent diluted fluid comprises a relatively stable emulsion. Dispose of via an authorised person/ licensed waste disposal contractor or by other suitable waste treatment techniques (e.g. emulsion splitting, coagulation and filtration) approved by the local authority. Spent fluid should never be disposed of down the drain. The aqueous phase should not be discharged into sewage systems unless provided for by local regulations; the non-aqueous phase should be disposed of as undiluted fluid. Note that separated aqueous solutions or effluents may contain metal salts as well as traces of oil and must be checked for conformity in these respects against consents given by the authorities before disposal. Further treatment may be required.

Section 14. Transport information

	DOT Classification	TDG Classification	IMDG	ΙΑΤΑ
UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-	-
Transport hazard class(es)	-	-	-	-

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Section 14. Transport information					
Packing group	-	-	-	-	
Environmental hazards	No.	No.	No.	No.	
Additional information	-	-	-	-	

Special precautions for user Not available.

Transport in bulk according to Annex II of MARPOL and the IBC Code

(TCSI) REACH Status Not available.

Section 15. Regulatory information

U.S. Federal regulations	
United States inventory (TSCA 8b)	KI components are active or exempted.
<u>SARA 302/304</u>	
Composition/information on i	ingredients
No products were found.	
SARA 311/312	
Classification	Not applicable.
<u>SARA 313</u>	
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
New Jersey	The following components are listed: BORATE COMPOUNDS, Inorganic; TRIETHANOLAMINE; ETHANOL, 2,2',2"-NITRILOTRIS-
Pennsylvania	The following components are listed: ETHANOL, 2,2',2"-NITRILOTRIS-
California Prop. 65	
WARNING: This product can For more information go to v	n expose you to Diethanolamine, which is known to the State of California to cause cancer. vww.P65Warnings.ca.gov.
Other regulations	
Australia inventory (AICS)	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 (ENCS)All components are listed or exempted.Korea inventory (KECI)All components are listed or exempted.Philippines inventoryAll components are listed or exempted.China inventoryAll components are listed or exempted.Philippines inventoryAll components are listed or exempted.China inventoryAll components are listed or exempted.China inventoryAll components are listed or exempted.China inventoryAll components are listed or exempted.

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

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Section 16. Other information

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



<u>History</u>	
Date of issue/Date of revision	08/22/2019.
Date of previous issue	06/27/2018.
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, 64742-45-6, 64742-45-6, 64742-52-5, 64742-53-6, 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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