SAFETY DATA SHEET

Section 1. Identification		
Product name	Variocut C 334	
SDS #	450924	
Historic SDS #:	05221	
Code	450924-US03	
Relevant identified uses	of the substance or mixture and uses advised against	
Product use	Metalworking fluid - neat. For specific application advice see appropriate Technical Data Sheet or consult our company representative.	
Supplier	Castrol Industrial North America, Inc. 150 W. Warrenville Road Naperville, IL 60563 Product Information: +1-877-641-1600	
	BP Lubricants USA Inc. 1500 Valley Road Wayne, NJ 07470 Telephone: (973) 633-2200	
EMERGENCY SPILL INFORMATION:	1 (800) 424-9300 CHEMTREC (USA)	

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	ASPIRATION HAZARD - Category 1	
GHS label elements		
Hazard pictograms		
Signal word	Danger	
Hazard statements	May be fatal if swallowed and enters airways.	
Precautionary statements		
Prevention	Not applicable.	
Response	IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting.	
Storage	Store locked up.	
Disposal	Dispose of contents and container in accordance with all local, regional, national and international regulations.	
Hazards not otherwise classified	Defatting to the skin.	

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Section 3. Composition/information on ingredients

Mixture

Highly refined mineral oil and additives.

Substance/mixture

Ingredient name	CAS number	%
	64742-55-8 64741-44-2	≥50 - <75 ≥10 - <25

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 or the environment 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. Get medical attention if symptoms occur.
Ingestion	Do not induce vomiting. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Aspiration hazard if swallowed. Can enter lungs and cause damage. Get medical attention immediately.
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. Product can be aspirated on swallowing or following regurgitation of stomach contents, and can cause severe and potentially fatal chemical pneumonitis, which will require urgent treatment. Because of the risk of aspiration, induction of vomiting and gastric lavage should be avoided. Gastric lavage should be undertaken only after endotracheal intubation. Monitor for cardiac dysrhythmias.
Specific treatments	No specific treatment.

Section 5. Fire-fighting measures

Extinguishing media	
Suitable extinguishing media	In case of fire, use foam, dry chemical or carbon dioxide extinguisher or spray.
Unsuitable extinguishing media	Do not use water jet.
Specific hazards arising from the chemical	Swarf fires - Neat metal working oils may fume, thermally decompose or ignite if they come into contact with red hot swarf. To minimise the generation of red hot swarf ensure that a sufficient flow of oil is correctly directed to the cutting edge of the tool to flood it throughout cutting operations. As an additional precaution swarf should be regularly cleared from the immediate area to prevent the risk of fire. In a fire or if heated, a pressure increase will occur and the container may burst.

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Section 5. Fire-fighting measures

Hazardous combustion products	Combustion products may include the following: carbon dioxide carbon monoxide
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.
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	e 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. Avoid breathing vapor or mist. Provide adequate ventilation. Put on appropriate personal protective equipment. Floors may be slippery; use care to avoid falling. Contact emergency personnel.	
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 conta	ainment 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). Avoid breathing vapor or mist. Avoid contact with eyes, skin and clothing. Empty containers retain product residue and can be hazardous. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Do not reuse container. Do not swallow. Aspiration hazard if swallowed. Can enter lungs and cause damage. Never siphon by mouth. Concentrations of mist, fumes and vapors in enclosed spaces may result in the formation of explosive atmospheres. Excessive splashing, agitation or heating must be avoided. 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, as can bacteria, and as a result may induce allergic and other skin reactions, especially if personal hygiene is inadequate. Advice on general Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Wash thoroughly after handling. Remove contaminated occupational hygiene clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

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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. Store locked up. 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.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Sistillates (petroleum), hydrotreated light paraffinic	ACGIH TLV (United States). TWA: 5 mg/m ³ 8 hours. Issued/Revised: 11/2009 Form: Inhalable fraction OSHA PEL (United States). TWA: 5 mg/m ³ 8 hours. Issued/Revised: 6/1993
Distillates (petroleum), straight-run middle	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.

Appropriate engineering controls	All activities involving chemicals should be assessed for their risks to h exposures are adequately controlled. Personal protective equipment sl considered after other forms of control measures (e.g. engineering cor suitably evaluated. Personal protective equipment should conform to a standards, be suitable for use, be kept in good condition and properly in Your supplier of personal protective equipment should be consulted for selection and appropriate standards. For further information contact ye organisation for standards. Provide exhaust ventilation or other engineering controls to keep the re- concentrations below their respective occupational exposure limits. The final choice of protective equipment will depend upon a risk asses important to ensure that all items of personal protective equipment are	hould only be htrols) have been appropriate maintained. r advice on our national elevant airborne sment. It is
Environmental exposure controls	Emissions from ventilation or work process equipment should be check comply with the requirements of environmental protection legislation. If fume scrubbers, filters or engineering modifications to the process equipmecessary to reduce emissions to acceptable levels.	In some cases,
Individual protection measures		
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical pro- eating, smoking and using the lavatory and at the end of the working p Appropriate techniques should be used to remove potentially contamin Wash contaminated clothing before reusing. Ensure that eyewash sta- showers are close to the workstation location.	eriod. ated clothing.
Eye/face protection	Safety glasses with side shields.	
Skin protection		
Hand protection	Wear protective gloves if prolonged or repeated contact is likely. Wear resistant gloves. Recommended: Nitrile gloves. The correct choice of depends upon the chemicals being handled, the conditions of work and condition of the gloves (even the best chemically resistant glove will br repeated chemical exposures). Most gloves provide only a short time of before they must be discarded and replaced. Because specific work e material handling practices vary, safety procedures should be develope intended application. Gloves should therefore be chosen in consultatio manufacturer and with a full assessment of the working conditions. Consult your supervisor or Standard Operating Procedure (S.O.P) for s	protective gloves d use, and the eak down after of protection nvironments and ed for each n with the supplier/
	instructions.	
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Section 8. Exposure controls/personal protection

Body protection	 Se of protective clothing is good industrial practice. 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. 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	In case of insufficient ventilation, wear suitable respiratory equipment. 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	Clear Yellow.
Odor	Mild.
Odor threshold	Not available.
рН	Not available.
Melting point	Not available.
Boiling point	Not available.
Flash point	Closed cup: 143°C (289.4°F) [Pensky-Martens.]
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	insoluble in water.
Partition coefficient: n- octanol/water	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Kinematic: 9.6 mm²/s (9.6 cSt) at 40°C

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	Kvoid all possible sources of ignition (spark or flame).		
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Section 10. Stability and reactivity

Incompatible materials

Reactive or incompatible with the following materials: oxidizing materials, acids and alkalis.

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

Aspiration hazard				
Name	Result			
istillates (petroleum), hydrotreated light paraffinic Distillates (petroleum), straight-run middle	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1			

Information on the likely routes of exposure	Routes of entry anticipated: Dermal, Inhalation.
Potential acute health effects	
Eye contact	No known significant effects or critical hazards.
Skin contact	No known significant effects or critical hazards.
Inhalation	Vapor inhalation under ambient conditions is not normally a problem due to low vapor pressure.
Ingestion	Aspiration hazard if swallowed harmful or fatal if liquid is aspirated into lungs.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	No specific data.
Skin contact	Adverse symptoms may include the following: irritation dryness cracking
Inhalation	No specific data.
Ingestion	Adverse symptoms may include the following: nausea or vomiting

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 effect	<u>s</u>
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

Not available.

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Section 12. Ecological information

Toxicity

No testing has been performed by the manufacturer.

Persistence and degradability

Expected to be biodegradable.

Bioaccumulative potential

Not available.

<u>Mobility in soil</u>	
Soil/water partition coefficient (K _{oc})	Not available.
Mobility	Non-volatile. Liquid. insoluble 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	ΙΑΤΑ
UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-	-
Transport hazard class(es)	-	-	-	-
Packing group	-	-	-	-
Environmental hazards	No.	No.	No.	No.
Additional information	-	-	-	-

Special precautions for user Not available.

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Section 14. Transport information

Section 15. Regulatory information

Transport in bulk according N to Annex II of MARPOL 73/78 and the IBC Code

Not available.

U.S. Federal regulations United States inventory All components are listed or exempted. (TSCA 8b) SARA 302/304 **Composition/information on ingredients** No products were found. SARA 311/312 Classification Not applicable. **SARA 313** Form R - Reporting This product does not contain any hazardous ingredients at or above regulated thresholds. requirements Supplier notification This product does not contain any hazardous ingredients at or above regulated thresholds. State regulations Massachusetts The following components are listed: MINERAL OIL, PETROLEUM DISTILLATES, HYDROTREATED LIGHT PARAFFINIC The following components are listed: MINERAL OIL (UNTREATED and MILDLY **New Jersey** TREATED) Pennsylvania The following components are listed: OILS, LARD California Prop. 65 No products were found. 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 inventory** All components are listed or exempted. (PICCS) **Taiwan inventory (CSNN)** 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

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



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 SDSs 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.

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

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Section 16. Other information



<u>History</u>	
Date of issue/Date of revision	09/24/2015.
Date of previous issue	09/08/2014.
revisionDate of previous issue09/08/2014.Key to abbreviationsACGIH = American Conference of Industrial Hygieni ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor CAS Number = Chemical Abstracts Service Registry, GHS = Globally Harmonized System of Classification IATA = International Air Transport Association IBC = Intermediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition co MARPOL 73/78 = International Convention for the P 1973 as modified by the Protocol of 1978. ("Marpol" 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 no Nations Committee of Experts on the Transport of D Varies = may contain one or more of the following 10 101316-71-6, 101316-72-7, 64741-88-4, 64741-89-5 64741-97-5, 64742-01-4, 64742-44-5, 64741-89-2 	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 = Internediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL 73/78 = 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

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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