SAFETY DATA SHEET

Section 1. Identification

Product name	Alphasyn T 68
SDS #	451119
Code	451119-FR01
Relevant identified uses	of the substance or mixture and uses advised against
Product use	Gear lubricant For specific application advice see appropriate Technical Data Sheet or consult our company representative.
Manufacturer	Castrol Industrial North America, Inc. 150 W. Warrenville Road Naperville, IL 60563
Supplier	Castrol Industrial North America, Inc. 150 W. Warrenville Road Naperville, IL 60563 Product Information: +1-877-641-1600
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	TOXIC TO REPRODUCTION (Fertility) - Category 2
GHS label elements	
Hazard pictograms	
Signal word	Warning
Hazard statements	Suspected of damaging fertility.
Precautionary statements	
Prevention	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required.
Response	IF exposed or concerned: Get medical attention.
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. Note: High Pressure Applications Injections through the skin resulting from contact with the product at high pressure constitute a major medical emergency. See 'Notes to physician' under First-Aid Measures, Section 4 of this Safety Data Sheet.

Product name	Alphasyn T 68		Product code	451119-FR01	Page: 1/9
Version 2	Date of issue 10/28/2014.	Format	US	Language	ENGLISH
			(US)		(ENGLISH)

Section 3. Composition/information on ingredients

Synthetic base stock. Proprietary performance additives.

Substance/mixture

Mixture

Ingredient name	CAS number	%
	1330-78-5 90-30-2	1-5 0.1-1

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	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. Get medical attention.
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. Get medical attention.
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.
	Note: High Pressure Applications Injections through the skin resulting from contact with the product at high pressure constitute a major medical emergency. Injuries may not appear serious at first but within a few hours tissue becomes swollen, discolored and extremely painful with extensive subcutaneous necrosis. Surgical exploration should be undertaken without delay. Thorough and extensive debridement of the wound and underlying tissue is necessary to minimize tissue loss and prevent or limit permanent damage. Note that high pressure may force the product considerable distances along tissue planes.
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	In a fire or if heated, a pressure increase will occur and the container may burst.

Product name	Alphasyn T 68		Product code	451119-FR01	Page: 2/9
Version 2	Date of issue 10/28/2014.	Format	US	Language	ENGLISH
			(US)		(ENGLISH)

Section 5. Fire-fighting measures

Hazardous combustion products	Combustion products may include the following: carbon dioxide carbon monoxide phosphorus oxides
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, protecti	ve 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 cor	tainment 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		

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. Avoid breathing vapor or mist. Do not ingest. 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. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid exposure during pregnancy. Eating, drinking and smoking should be prohibited in areas where this material is Advice on general 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.

product. Dispose of via a licensed waste disposal contractor.

Product nam	e Alphasyn T 68		Product code	451119-FR01	Page: 3/9
Version 2	Date of issue 10/28/2014.	Format	US	Language	ENGLISH
			(US)		(ENGLISH)

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

This product does not have any assigned OELs.

Appropriate engineering controls	All activities involving chemicals a exposures are adequately contro- considered after other forms of c suitably evaluated. Personal pro- standards, be suitable for use, be Your supplier of personal protect selection and appropriate standar organisation for standards. Provide exhaust ventilation or oth concentrations below their respe The final choice of protective equi important to ensure that all items	Iled. Personal prote ontrol measures (e. tective equipment s e kept in good cond ive equipment shou rds. For further info ner engineering con ctive occupational e ipment will depend	ective equipment sho .g. engineering contr should conform to ap lition and properly ma uld be consulted for a ormation contact you htrols to keep the rele exposure limits.	ould only be rols) have been propriate aintained. advice on ur national evant airborne nent. It is
Environmental exposure controls	Emissions from ventilation or wo comply with the requirements of fume scrubbers, filters or engine necessary to reduce emissions to	environmental prote ering modifications	ection legislation. In to the process equip	some cases,
Individual protection measures				
Hygiene measures	Wash hands, forearms and face eating, smoking and using the lar Appropriate techniques should be Wash contaminated clothing befor showers are close to the worksta	vatory and at the er e used to remove p ore reusing. Ensure	nd of the working per otentially contaminat	riod. ted clothing.
Eye/face protection	Safety glasses with side shields.			
Skin protection				
Hand protection	Wear protective gloves if prolong resistant gloves. Recommended depends upon the chemicals beil condition of the gloves (even the repeated chemical exposures). M before they must be discarded at material handling practices vary, intended application. Gloves sho manufacturer and with a full asse	I: Nitrile gloves. The ng handled, the cor- best chemically res flost gloves provide nd replaced. Becau safety procedures s uld therefore be che	e correct choice of p nditions of work and u sistant glove will breat only a short time of use specific work env should be developed osen in consultation	rotective gloves use, and the ak down after protection <i>v</i> ironments and I for each
	Consult your supervisor or Stand instructions.	ard Operating Proc	edure (S.O.P) for sp	ecial handling
Body protection	Use of protective clothing is good will only provide protection again through to the skin. Overalls sho skin exposure is high (e.g. when then chemical resistant aprons a required. Personal protective eq task being performed and the ris before handling this product.	st light superficial c buld be laundered o cleaning up spillage nd/or impervious ch uipment for the boo	ontamination that wil n a regular basis. W es or if there is a risk nemical suits and boo ly should be selected	II not soak /hen the risk of < of splashing) ots will be d based on the
Other skin protection	Appropriate footwear and any ad based on the task being perform specialist before handling this pro-	ed and the risks inv		
Product name Alphasyn T 68		Product code	451119-FR01	Page: 4/9
Version 2 Date of issue 10	/28/2014. Format	US	Language	ENGLISH
		(US)		(ENGLISH)

Section 8. Exposure controls/personal protection

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

Liquid.
Yellow.
Not available.
Øosed cup: 210°C (410°F) [Pensky-Martens.]
Not available.
Not applicable. Based on - Physical state
Not available.
Not available.
Not available.
<1000 kg/m³ (<1 g/cm³) at 15°C
insoluble in water.
Not available.
Not available.
Not available.
Kinematic: 68 mm²/s (68 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	Avoid all possible sources of ignition (spark or flame).
Incompatible materials	Reactive or incompatible with the following materials: oxidizing materials.
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Product name	Alphasyn T 68		Product code	451119-FR01	Page: 5/9
Version 2	Date of issue 10/28/2014.	Format	US	Language	ENGLISH
			(US)		(ENGLISH)

Section 11. Toxicological information

Information on toxicological effects

Specific target organ toxicity (single exposure)

Specific target organ toxicity	<u>r (single exposure)</u>			
Name		Category	Route of exposure	Target organs
n-phenyl-1-naphthylamine		Category 2	Oral	blood system
Information on the likely routes of exposure	Routes of entry antici	pated: Dermal, Inhalati	on.	
Potential acute health effects				
Eye contact	No known significant	effects or critical hazar	ds.	
Skin contact	No known significant	effects or critical hazar	ds.	
Inhalation	Vapor inhalation unde pressure.	er ambient conditions is	not normally a pro	blem due to low vapor
Ingestion	No known significant	effects or critical hazar	ds.	
Symptoms related to the phys	ical, chemical and toxi	cological characterist	ics	
Eye contact	No specific data.			
Skin contact	Adverse symptoms m irritation dryness cracking reduced fetal weight increase in fetal death skeletal malformation		g:	
Inhalation	No specific data.			
Ingestion	Adverse symptoms m reduced fetal weight increase in fetal death skeletal malformation		g:	
Delayed and immediate effect	s and also chronic effe	cts from short and loi	<u>ng term exposure</u>	
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 effe	<u>cts</u>			
General	No known significant	effects or critical hazar	ds.	
Carcinogenicity	No known significant	effects or critical hazar	ds.	
Mutagenicity	No known significant	effects or critical hazar	ds.	
Teratogenicity	No known significant	effects or critical hazar	ds.	
Developmental effects	No known significant	effects or critical hazar	ds.	
Fertility effects	Suspected of damagi	ing fertility.		
Numerical measures of toxicit Acute toxicity estimates Not available.	Υ			

Product name	Alphasyn T 68		Product code	451119-FR01	Page: 6/9
Version 2	Date of issue 10/28/2014.	Format	US	Language	ENGLISH
			(US)		(ENGLISH)

Section 12. Ecological information

<u>Toxicity</u>

No testing has been performed by the manufacturer.

Persistence and degradability

Not expected to be rapidly degradable.

Bioaccumulative potential

This product is not expected to bioaccumulate through food chains in the environment.

Mobility in soil	
Soil/water partition coefficient (Koc)	Not available.
Mobility	Spillages may penetrate the soil causing ground water contamination.
Other adverse effects	No known significant effects or critical hazards.
Other ecological information	Spills may form a film on water surfaces causing physical damage to organisms. Oxygen transfer could also be impaired.

Section 13. Disposal considerations

Disposal methodsThe 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.

Product name	Alphasyn T 68		Product code	451119-FR01	Page: 7/9
Version 2	Date of issue 10/28/2014.	Format	US	Language	ENGLISH
			(US)		(ENGLISH)

Section 14. Transport information

Transport in bulk according Not available. to Annex II of MARPOL 73/78 and the IBC Code

Section 15. Regulatory information

U.S. Federal regulations	
United States inventory (TSCA 8b)	All components are listed or exempted.
<u>SARA 302/304</u>	
Composition/information	on ingredients
No products were found.	
<u>SARA 311/312</u>	
Classification	Delayed (chronic) health hazard
<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	None of the components are listed.
New Jersey	The following components are listed: TRICRESYL PHOSPHATE; PHOSPHORIC ACID, TRIS(METHYLPHENYL) ESTER
Pennsylvania	None of the components are listed.
California Prop. 65	WARNING: This product contains a chemical known to the State of California to cause cancer. 1-Naphthylamine; Aniline; 2-naphthylamine
Other regulations	
Australia inventory (AICS)	All components are listed or exempted.
Canada inventory	🗚 least one component is not listed.
China inventory (IECSC)	All components are listed or exempted.
Japan inventory (ENCS)	All components are listed or exempted.
Korea inventory (KECI)	🕅 least one component is not listed.
Philippines inventory (PICCS)	All components are listed or exempted.
REACH Status	The company, as identified in Section 1, sells this product in the EU in compliance with the current requirements of REACH.

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.)

ſ	Product name	Alphasyn T 68		Product code	451119-FR01	Page: 8/9
	Version 2	Date of issue 10/28/2014.	Format	US	Language	ENGLISH
				(US)		(ENGLISH)

Section 16. Other information



<u>History</u>	
Date of issue/Date of revision	10/28/2014.
Date of previous issue	04/03/2014.
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 = 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 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.

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.

Product name	Alphasyn T 68	Product code	451119-FR01	Page: 9/9
Version 2	Date of issue 10/28/2014.	Format US	Language	ENGLISH
		(US)		(ENGLISH)