

SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier	
Trade name or designation of the mixture	Comma X Flow Type P 5W30
Registration number	-
Synonyms	None.
Product code	XFP*L
Issue date	10-December-2018
Version number	11
Revision date	10-December-2018
1.2. Relevant identified uses of	the substance or mixture and uses advised against
Identified uses	Automotive lubricant
Uses advised against	None known.
1.3. Details of the supplier of the	e safety data sheet
	Manufactured by Moove Lubricants
Address	Dering Way, Gravesend, Kent DA12 2QX
Telephone	+44 (0) 1474 564 311
Address	Operations Plant Dering Way, Gravesend, Kent DA12 2QX
Telephone	+44 (0) 1474 564 311
Email	technical@uk.moovelub.com
1.4. Emergency telephone	
Asia Pacific	+ (1) 760 476 3960
China	+ (86) 4001 2001 74
Europe	+ (44) 8 08 189 0979
Middle East/Africa	+ (1) 760 476 3959
Access code	334498

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

Classification according to Regulation (EC) No 1272/2008 as amended

This mixture does not meet the criteria for classification according to Regulation (EC) 1272/2008 as amended.

Hazard summary Not available.

2.2. Label elements

Label according to Regulation (EC) No. 1272/2008 as amended

Hazard pictograms	None.
Signal word	None.
Hazard statements	The mixture does not meet the criteria for classification.
Precautionary statements	
Prevention	Not available.
Response	Not available.
Storage	Not available.
Disposal	Not available.
Supplemental label information	EUH208 - Contains C14-16-18 Alkyl phenol, MOLYBDENUM POLYSULPHIDE LONG CHAIN ALKYL DITHIOCARBAMATE COMPLEX. May produce an allergic reaction.
2.3. Other hazards	Not a PBT or vPvB substance or mixture.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General information Chemical name	9	CAS No.		PEACH Pagiatratian No.	Index No.	Notes
BIS(NONYLPHENYL)AMINE				REACH Registration No. 01-2119488911-28	index no.	Notes
		253-24		01-2119400911-20	-	
Classification: Aqu	uatic Chronic 4	H413				
REACTION MASS OF ISOME C7-9-ALKYL 3-(3,5-DI-TERT-BUTYL-4-HY		< 3 125643 406-04		-	607-530-00-7	
PHENYL)PROPIONATE Classification: Aqu	uatic Chronic 4	H413				
C14-16-18 Alkyl phenol	<		A	-	-	
Classification: Ski	n Sens. 1B;H3	- 17, STOT RE 2;H	1373			
MOLYBDENUM POLYSULPH LONG CHAIN ALKYL DITHIOCARBAMATE COMPL		0.3 SEQ51 457-32		01-0000019337-66	-	
		Skin Sens. 1B:H	317. Aqua	tic Chronic 3;H412		
Other components below repo			· 1			
.ist of abbreviations and symbol #: This substance has been a M: M-factor PBT: persistent, bioaccumula vPvB: very persistent and ver All concentrations are in percentered.	ssigned Union tive and toxic s y bioaccumulat	workplace expos ubstance. ive substance.	·		percent by volume.	
Composition comments	The full text f	or all H-statemer	nts is disp	ayed in section 16.		
SECTION 4: First aid meas	SIILES					
General information			el are awa	re of the material(s) involve	ed, and take precau	itions to
1.1. Description of first aid meas	•	Serves.				
Inhalation		n air. Call a physi	cian if svr	nptoms develop or persist.		
Skin contact	Move to fresh air. Call a physician if symptoms develop or persist. Wash off with soap and water. Get medical attention if irritation develops and persists.					
Eye contact	Rinse with water. Get medical attention if irritation develops and persists.					
Ingestion	Rinse mouth	Get medical atte	ention if s	ymptoms occur.		
1.2. Most important symptoms Exposure may cause temporary irritation, redness, or discomfort. and effects, both acute and delayed						
I.3. Indication of any mmediate medical attention and special treatment needed	Treat sympto	matically.				
SECTION 5: Firefighting m	neasures					
General fire hazards	No unusual f	re or explosion h	azards no	oted.		
5.1. Extinguishing media Suitable extinguishing media	Water fog. F	oam. Dry chemic	al powder	. Carbon dioxide (CO2).		
Unsuitable extinguishing media	Do not use w	ater jet as an ext	inguisher	, as this will spread the fire		
5.2. Special hazards arising rom the substance or mixture	During fire, g	ases hazardous	to health	may be formed.		
5.3. Advice for firefighters Special protective equipment for firefighters	Self-containe	d breathing appa	aratus and	I full protective clothing mu	st be worn in case	of fire.
Special fire fighting procedures	Move contair	ers from fire area	a if you ca	an do so without risk.		
Specific methods	Use standard	I firefighting proc	edures ar	nd consider the hazards of	other involved mate	erials.
SECTION 6: Accidental rel	lease meas	ures				
3.1 Personal precautions prote	otivo oquinmo	nt and omorgon		durae		

6.1. Personal precautions, protective equipment and emergency procedures For non-emergency Keep unnecessary personnel away. For personal protection, see section 8 of the SDS. personnel

For emergency responders	Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the SDS.
6.2. Environmental precautions	Avoid discharge into drains, water courses or onto the ground.
6.3. Methods and material for containment and cleaning up	Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.
	Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.
	Never return spills to original containers for re-use.
6.4. Reference to other sections	For personal protection, see section 8 of the SDS. For waste disposal, see section 13 of the SDS.
SECTION 7: Handling and	storage
7.1. Precautions for safe handling	Avoid prolonged exposure. Observe good industrial hygiene practices.
7.2. Conditions for safe storage, including any incompatibilities	Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).
7.3. Specific end use(s)	Automotive lubricant
SECTION 8: Exposure con	trols/personal protection
8.1. Control parameters	
Occupational exposure limits	No exposure limits noted for ingredient(s).
Biological limit values	No biological exposure limits noted for the ingredient(s).
Recommended monitoring procedures	Follow standard monitoring procedures.
Derived no effect levels (DNELs)	Not available.
Predicted no effect concentrations (PNECs)	Not available.
8.2. Exposure controls	
Appropriate engineering controls	Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.
Individual protoction measures	auch as nareanal protoctive againment

Individual protection measures, such as personal protective equipment

General information	Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.		
Eye/face protection	Wear safety glasses with side shields (or goggles).		
Skin protection			
- Hand protection	Wear appropriate chemical resistant gloves.		
- Other	Wear suitable protective clothing.		
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment.		
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.		
Hygiene measures	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.		
Environmental exposure controls	Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.		

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	
Physical state	Liquid.
Form	Liquid.
Colour	Gold Brown.
Odour Slight.	

	Net eveileble
Odour threshold	Not available. Not available.
pH Molting point/freezing point	Not available.
Melting point/freezing point Initial boiling point and boiling	Not available.
range	
Flash point	> 200.0 °C (> 392.0 °F)
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or exp	losive limits
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Vapour pressure	0.1 hPa estimated
Vapour density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	260 °C (500 °F) estimated
Decomposition temperature	Not available.
Viscosity	Not available.
Explosive properties	Not explosive.
Oxidising properties	Not oxidising.
9.2. Other information	
Density	0.85 g/cm3
Kinematic viscosity	70 mm²/s (40 °C (104 °F))
Percent volatile	0.02 % estimated
Specific gravity	0.88 estimated
VOC	0.02 % estimated
SECTION 10: Stability and	l reactivity
10.1. Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
10.2. Chemical stability	Material is stable under normal conditions.
10.3. Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
10.4. Conditions to avoid	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Contact with incompatible materials.
10.5. Incompatible materials	Strong oxidising agents.
10.6. Hazardous decomposition products	No hazardous decomposition products are known.
SECTION 11: Toxicologica	al information
General information	Occupational exposure to the substance or mixture may cause adverse effects.
Information on likely routes of e	xposure
Inhalation	May cause allergy or asthma symptoms or breathing difficulties if inhaled. Prolonged inhalation may be harmful.
Skin contact	May cause an allergic skin reaction.
Eye contact	Direct contact with eyes may cause temporary irritation.
Ingestion	May cause discomfort if swallowed. However, ingestion is not likely to be a primary route of occupational exposure.
Symptoms	Exposure may cause temporary irritation, redness, or discomfort.
11.1. Information on toxicologic	al effects
Acute toxicity	Not known.
/	

Components	Species	Test Results		
BIS(NONYLPHENYL)AMINE (CAS 36878-20-3)				
Acute				
Dermal				
LD50	Rat	> 2000 mg/kg		
Oral				
LD50	Rat	> 5000 mg/kg		
REACTION MASS OF ISOMERS	OF: C7-9-ALKYL 3-(3,5-DI-TERT-BUT	YL-4-HYDROXYPHENYL)PROPIONATE (CAS 125643-61-0)		
<u>Acute</u>				
Dermal				
LD50	Rat	> 2000 mg/kg		
Oral				
LD50	Rat	> 2000 mg/kg		
Skin corrosion/irritation	Due to partial or complete lack of data the classification is not possible.			
Serious eye damage/eye irritation	Due to partial or complete lack of da	ta the classification is not possible.		
Respiratory sensitisation	Due to partial or complete lack of data the classification is not possible.			
Skin sensitisation	Due to partial or complete lack of da	ta the classification is not possible.		
Germ cell mutagenicity	Due to partial or complete lack of da	ta the classification is not possible.		
Carcinogenicity	Due to partial or complete lack of da	ta the classification is not possible.		
Reproductive toxicity	Due to partial or complete lack of da	ta the classification is not possible.		
Specific target organ toxicity - single exposure	Due to partial or complete lack of da	ta the classification is not possible.		
Specific target organ toxicity - repeated exposure	Due to partial or complete lack of da	ta the classification is not possible.		
Aspiration hazard	Due to partial or complete lack of da	ta the classification is not possible.		
Mixture versus substance information	No information available.			
Other information	May cause allergic respiratory and skin reactions.			
SECTION 12: Ecological in	nformation			
12.1. Toxicity	Based on available data, the classifi	cation criteria are not met for hazardous to the aquatic		

environment, acute hazard. Due to partial or complete lack of data the classification for hazardous to the aquatic environment, long term hazard, is not possible.

Product	Species		Test Results
Comma X Flow Type P 5W30			
Aquatic			
Crustacea	EC50	Daphnia	6125 mg/l, 48 hours estimated
Fish	LC50	Fish	21693.75 mg/l, 96 hours estimated
12.2. Persistence and degradability	No data is av	vailable on the degrae	dability of any ingredients in the mixture.
12.3. Bioaccumulative potential	No data avai	No data available.	
Partition coefficient n-octanol/water (log Kow)	Not available.		
Bioconcentration factor (BCF)	Not available.		
12.4. Mobility in soil	No data available.		
12.5. Results of PBT and vPvB assessment	Not a PBT or vPvB substance or mixture.		
12.6. Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creatio potential, endocrine disruption, global warming potential) are expected from this component		

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Residual waste

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.
EU waste code	The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Disposal methods/information	Collect and reclaim or dispose in sealed containers at licensed waste disposal site.
Special precautions	Dispose in accordance with all applicable regulations.

SECTION 14: Transport information

ADR

14.1. - 14.6.: Not regulated as dangerous goods.

RID

14.1. - 14.6.: Not regulated as dangerous goods.

ADN

14.1. - 14.6.: Not regulated as dangerous goods.

ΙΑΤΑ

14.1. - 14.6.: Not regulated as dangerous goods.

IMDG

14.1. - 14.6.: Not regulated as dangerous goods.

14.7. Transport in bulk Not established.

according to Annex II of MARPOL 73/78 and the IBC

Code

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulations

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended Not listed.

Regulation (EC) No. 850/2004 On persistent organic pollutants, Annex I as amended Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended Not listed.

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended Not listed.

Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA Not listed.

Authorisations

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended Not listed.

Restrictions on use

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended Not listed.

Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended.

Not listed.

Other EU regulations

Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended

Not listed.

Other regulations	The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP Regulation) as amended. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006, as amended.
National regulations	Follow national regulation for work with chemical agents in accordance with Directive 98/24/EC, as amended.

15.2. Chemical safety No assessment

SECTION 16: Other information

List of abbreviations References Information on evaluation method leading to the classification of mixture	Not available. Not available. The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.
Full text of any H-statements not written out in full under Sections 2 to 15	H315 Causes skin irritation. H317 May cause an allergic skin reaction. H373 May cause damage to organs through prolonged or repeated exposure. H412 Harmful to aquatic life with long lasting effects. H413 May cause long lasting harmful effects to aquatic life.
Revision information	This document has undergone significant changes and should be reviewed in its entirety.
Training information	Follow training instructions when handling this material.
Disclaimer	Moove Lubricants Itd. cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.

Material name: Comma X Flow Type P 5W30 - Moove Lubricants ltd. XFP*L Version #: 11 Revision date: 10-December-2018 Issue date: 10-December-2018