

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 Xstream G48				
Registration number	-				
Synonyms	None.				
Product code	XSG*L				
Issue date	31-October-2018				
Version number	13				
Revision date	31-October-2018				
1.2. Relevant identified uses of the substance or mixture and uses advised against					
Identified uses	Antifreeze or coolant				
Uses advised against	None known.				
1.3. Details of the supplier of the 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

Health hazards

Acute toxicity, oral	Category 4
Specific target organ toxicity - repeated exposure	Category 2 (kidney)

H302 - Harmful if swallowed. H373 - May cause damage to organs (kidney) through prolonged or repeated exposure.

Hazard summary

Harmful if swallowed. May cause damage to organs through prolonged or repeated exposure. Occupational exposure to the substance or mixture may cause adverse health effects.

2.2. Label elements

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

Contains: Hazard pictograms



Signal word Hazard statements H302 H373

Harmful if swallowed. May cause damage to organs (kidney) through prolonged or repeated exposure.

Precautionary statements Prevention

P102 P264 P270	Keep out of reach of children. Wash thoroughly after handling. Do not eat, drink or smoke when using this product.
Response	
P301 + P310 P330	IF SWALLOWED: Immediately call a POISON CENTRE/doctor. Rinse mouth.
Storage	Not available.
Disposal	
P501	Dispose of waste and residues in accordance with local authority requirements.
Supplemental label information	None.
2.3. Other hazards	Not a PBT or vPvB substance or mixture.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General information

	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
	80 - < 90	107-21-1 203-473-3	01-2119456816-28	603-027-00-1	#
Acute Tox. 4	;H302, ST	OT RE 2;H373			
, SODIUM	1 - < 3	19766-89-3 243-283-8	-	-	
Repr. 2;H36	1				
ahydrate	< 1	12179-04-3 215-540-4	01-2119490790-32	005-011-02-9	
Eye Irrit. 2;H	319, Repr.	1B;H360D, Repr. 1E	3;H360F		
	D, SODIUM Repr. 2;H36 ahydrate	80 - < 90 Acute Tox. 4;H302, ST 0, SODIUM 1 - < 3 Repr. 2;H361 ahydrate < 1	80 - < 90	80 - < 90	80 - < 90 $107-21-1$ $203-473-3$ $01-2119456816-28$ $603-027-00-1$ Acute Tox. 4;H302, STOT RE 2;H373 $01-2119456816-28$ $603-027-00-1$ $0, SODIUM$ $1 - < 3$ $19766-89-3$ $243-283-8$ $-$ Repr. 2;H361 $ -$ ahydrate< 1

List of abbreviations and symbols that may be used above

#: This substance has been assigned Union workplace exposure limit(s).

M: M-factor

delayed

PBT: persistent, bioaccumulative and toxic substance.

vPvB: very persistent and very bioaccumulative substance.

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

Composition comments The full text for all H-statements is displayed in section 16.

SECTION 4: First aid measures

General information	If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.
4.1. Description of first aid meas	sures
Inhalation	Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact	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. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get medical advice/attention if you feel unwell.
4.2. Most important symptoms and effects, both acute and	Convulsions. Dizziness. Nausea, vomiting. Abdominal pain. Oedema. Prolonged exposure may cause chronic effects.

4.3. Indication of any immediate medical attention and special treatment needed Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

SECTION 5: Firefighting measures

0 0	
General fire hazards	No unusual fire or explosion hazards noted.
5.1. Extinguishing media	
Suitable extinguishing media	Alcohol resistant foam. Powder. Carbon dioxide (CO2).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture	During fire, gases hazardous to health may be formed.			
5.3. Advice for firefighters				
Special protective equipment for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.			
Special fire fighting procedures	Move containers from fire area if you can do so without risk.			
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.			
SECTION 6. Applicatel release measures				

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapour. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.		
For emergency responders	Keep unnecessary personnel away.		
6.2. Environmental precautions	Avoid discharge into drains, water courses or onto the ground.		
6.3. Methods and material for containment and cleaning up	Use water spray to reduce vapours or divert vapour cloud drift.		
	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. For waste disposal, see section 13 of the SDS.		
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	Do not breathe mist or vapour. Do not taste or swallow. Avoid prolonged exposure. When using, do not eat, drink or smoke. Provide adequate ventilation. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices.
7.2. Conditions for safe storage, including any incompatibilities	Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).
7.3. Specific end use(s)	Antifreeze or coolant

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

Components	Туре	Value	Form
Ethylene glycol (CAS 107-21-1)	STEL	104 mg/m3	Vapour.
		40 ppm	Vapour.
	TWA	52 mg/m3	Vapour.
		10 mg/m3	Particulate.
		20 ppm	Vapour.

EU. Indicative Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU Components Type Value

Components	туре	Value	
Ethylene glycol (CAS 107-21-1)	STEL	104 mg/m3	
		40 ppm	
	TWA	52 mg/m3	
		20 ppm	
ological limit values	No biological exposure limits noted for the ingredient(s).		

Biological limit values Recommended monitoring

procedures

Follow standard monitoring procedures.

Derived no effect levels (DNELs)	Not available.
Predicted no effect concentrations (PNECs)	Not available.
Exposure guidelines	
UK EH40 WEL: Skin design	ation
Ethylene glycol (CAS 107	7-21-1) Can be absorbed through the skin.
8.2. Exposure controls	
Appropriate engineering controls	Good general ventilation (typically 10 air changes per hour) 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 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	Chemical respirator with organic vapour cartridge and full facepiece.
Skin protection	
- Hand protection	Wear appropriate chemical resistant gloves.
- Other	Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.
Respiratory protection	Chemical respirator with organic vapour cartridge and full facepiece.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
Hygiene measures	Keep away from food and drink. 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	Environmental manager must be informed of all major releases.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	
Physical state	Liquid.
Form	Liquid.
Colour	Dark blue Green.
Odour	Odourless.
Odour threshold	Not available.
рН	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	170 °C (338 °F)
Flash point	> 120.0 °C (> 248.0 °F)
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or expl	osive limits
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Vapour pressure	0.12 hPa estimated
Vapour density	Not available.
Relative density	1.122
Relative density temperature	20 °C (68 °F)
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	397.78 °C (748 °F) estimated

Decomposition temperature	Not available.
Viscosity	Not available.
Explosive properties	Not explosive.
Oxidising properties	Not oxidising.
9.2. Other information	No relevant additional information available.

SECTION 10: Stability and 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	Contact with incompatible materials.
10.5. Incompatible materials	Strong oxidising agents.
10.6. Hazardous decomposition products	No hazardous decomposition products are known.

SECTION 11: Toxicological information

Occupational exposure to the substance or mixture may cause adverse effects.

Information on likely routes of exposure		
Inhalation	May cause damage to organs through prolonged or repeated exposure by inhalation.	
Skin contact	No adverse effects due to skin contact are expected.	
Eye contact	Direct contact with eyes may cause temporary irritation.	
Ingestion	Harmful if swallowed.	
Symptoms	Convulsions. Dizziness. Nausea, vomiting. Abdominal pain. Oedema.	

11.1. Information on toxicological effects

General information

Acute toxicity	Harmful if swallowed.	
Components	Species	Test Results
2-ETHYLHEXANOIC ACID, S	ODIUM SALT (CAS 19766-89-3)	
<u>Acute</u>		
Dermal		
LD50	Rat	> 2000 mg/kg, 24 Hours
Oral		
LD50	Rat	2043 mg/kg
Disodium tetraborate pentahy	drate (CAS 12179-04-3)	
<u>Acute</u>		
Dermal		
LD50	Rabbit	> 1055 mg/kg
Inhalation		
LC50	Rat	> 0.002 mg/l, 4 Hours
Oral		
LD50	Rat	> 250 mg/kg
Ethylene glycol (CAS 107-21-	1)	
<u>Acute</u>		
Dermal		
LD50	Rabbit	9530 mg/kg
Oral		
LD50	Rat	5.89 g/kg
* Estimates for product m	ay be based on additional component da	ta not shown.
Skin corrosion/irritation	Due to partial or complete lack of d	ata the classification is not possible.
Serious eye damage/eye	Due to partial or complete lack of data the classification is not possible.	

irritation	
Respiratory sensitisation	Due to partial or complete lack of data the classification is not possible.
Skin sensitisation	Due to partial or complete lack of data the classification is not possible.
Germ cell mutagenicity	Due to partial or complete lack of data the classification is not possible.
Carcinogenicity	Due to partial or complete lack of data the classification is not possible.

Reproductive toxicity	•	Due to partial or complete lack of data the classification is not possible.		
Specific target organ toxicity - single exposure	Due to pa	Due to partial or complete lack of data the classification is not possible.		
Specific target organ toxicity - repeated exposure	May cause	May cause damage to organs (kidney) through prolonged or repeated exposure.		
Aspiration hazard	Due to pa	rtial or complete lack of data the clas	ssification is not possible.	
Mixture versus substance information	No inform	ation available.		
Other information	Not availa	ble.		
SECTION 12: Ecological i	nformatio	n		
12.1. Toxicity		Based on available data, the classification criteria are not met for hazardous to the aquatic environment.		
Product		Species	Test Results	
Comma Xstream G48				
Aquatic				
Fish	LC50	Fish	11336.9678 mg/l, 96 hours estimated	
Components		Species	Test Results	
Disodium tetraborate pentahydrat	e (CAS 1217	79-04-3)		
Aquatic	1.050			
Fish	LC50	Western mosquitofish (Gambu	sia affinis) 104 mg/i, 96 nours	
Ethylene glycol (CAS 107-21-1) Aquatic				
Fish	LC50	Fathead minnow (Pimephales	promelas) 8050 mg/l, 96 hours	
* Estimates for product may b	be based on	additional component data not show	'n.	
12.2. Persistence and degradability	No data is available on the degradability of this product.			
12.3. Bioaccumulative potential				
Partition coefficient				
n-octanol/water (log Kow) Ethylene glycol		-1.36		
Bioconcentration factor (BCF)	Not availa	Not available.		
12.4. Mobility in soil	No data a	No data available.		
12.5. Results of PBT and vPvB assessment	Not a PBT	Not a PBT or vPvB substance or mixture.		
12.6. Other adverse effects		No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.		
SECTION 13: Disposal co	nsideratio	ons		
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:			
Contaminated packaging	Disposal instructions). 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. Dispose of contents/container in accordance with local/regional/national/international regulations.			
Special precautions	Dispose ir	n accordance with all applicable regu	llations.	

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.

XSG*L Version #: 13 Revision date: 31-October-2018 Issue date: 31-October-2018

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 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 established.

- 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

Disodium tetraborate pentahydrate (CAS 12179-04-3)

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 Disodium tetraborate pentahydrate (CAS 12179-04-3)

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 ma	ajor accident hazards involving dangerous substances, as amended
Not listed.	
Other regulations	The product is classified and labelled in accordance with EC directives or respective national laws. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006, as amended. The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP Regulation) as amended.
National regulations	Follow national regulation for work with chemical agents.
	Follow national regulation on the protection of workers from the risks of exposure to carcinogens and mutagens at work, in accordance with Directive 2004/37/EC.
15.2. Chemical safety assessment	No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

List of abbreviations	Not available.
References	Not available.
Information on evaluation method leading to the classification of mixture	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	H302 Harmful if swallowed.

Revision information Training information Disclaimer H319 Causes serious eye irritation.
H360D May damage the unborn child.
H360F May damage fertility.
H361 Suspected of damaging fertility or the unborn child.
H373 May cause damage to organs through prolonged or repeated exposure.
Product and Company Identification: Alternate Trade Names
Follow training instructions when handling this material.
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.