SAFETY DATA SHEET



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

1.1. Product identifier

Trade name or designation

Comma Super Coldmaster Concentrate

of the mixture

Registration number -

Synonyms None.

Product code SCA*L

Issue date 01-November-2018

Version number 10

Revision date 01-November-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 H302 - Harmful if swallowed.

Specific target organ toxicity - repeated exposure Category 2 (kidney) 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: Ethylene glycol

Hazard pictograms



Signal word Warning

Hazard statements

H302 Harmful if swallowed.

H373 May cause damage to organs (kidney) through prolonged or repeated exposure.

Precautionary statements

Prevention

P102 Keep out of reach of children.
P264 Wash thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

Response

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTRE/doctor.

P330 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 hazardsNot a PBT or vPvB substance or mixture.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
Ethylene glycol	80 - < 90	107-21-1 203-473-3	01-2119456816-28	603-027-00-1	#
Classification: Acute Tox.	4;H302, ST	OT RE 2;H373			
Disodium tetraborate pentahydrate	1 - < 3	12179-04-3 215-540-4	01-2119490790-32	005-011-02-9	
Classification: Eye Irrit. 2;	H319, Repr.	1B;H360D, Repr. 1E	3;H360F		
Other components below reportable	5 - < 10				

Other components below reportable 5 - < 10 levels

List of abbreviations and symbols that may be used above

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

M: M-factor

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 measures

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

delayed

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

General fire hazards No unusual fire or explosion hazards noted.

5.1. Extinguishing media

Suitable extinguishing

J

Alcohol resistant foam. Powder. Carbon dioxide (CO2).

Unsuitable extinguishing

media Unsuit 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

Move containers from fire area if you can do so without risk.

procedures Specific methods

Use standard firefighting procedures and consider the hazards of other involved materials.

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. Use water spray to reduce vapours or divert vapour cloud drift.

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. For waste disposal, see section 13 of the SDS. For personal protection, see section 8 of the SDS. For waste disposal, see section 13 of the SDS.

6.4. Reference to other sections

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

20 ppm

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

IIK EH40 Workplace Exposure Limite (WELs)

		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.

Components	туре	value
Ethylene glycol (CAS 107-21-1)	STEL	104 mg/m3
		40 ppm
	TWA	52 mg/m3

No biological exposure limits noted for the ingredient(s). **Biological limit values** Follow standard monitoring procedures.

Recommended monitoring procedures

Not available.

Derived no effect levels

(DNELs)

Predicted no effect concentrations (PNECs)

Not available.

Exposure guidelines

UK EH40 WEL: Skin designation

Ethylene glycol (CAS 107-21-1)

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 Blue
Odour Odourless.

Odour threshold Not available.

pH

Melting point/freezing point Not available.

Initial boiling point and boiling 165 °C (329 °F)

range

Flash point 111.0 °C (231.8 °F) **Evaporation rate** Not available.

Evaporation rate Not available.

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower

Not available.

(%)

Flammability limit - upper

Not available.

(%)

Vapour pressure 0.12 hPa estimated

Vapour density Not available.

Relative density 1.125

Relative density temperature 20 °C (68 °F)

Solubility(ies)

Solubility (water) Not available.

Partition coefficient Not available.

(n-octanol/water)

Auto-ignition temperature 397.78 °C (748 °F) estimated

Decomposition temperatureNot available.ViscosityNot available.

Not explosive. **Explosive properties** Not oxidising. Oxidising properties

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.

No hazardous decomposition products are known. 10.6. Hazardous

decomposition products

SECTION 11: Toxicological information

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

Information on likely routes of exposure

Inhalation Not available.

Skin contact No adverse effects due to skin contact are expected. Direct contact with eyes may cause temporary irritation. Eye contact

Harmful if swallowed. Ingestion

Convulsions. Dizziness. Nausea, vomiting. Abdominal pain. Oedema. **Symptoms**

11.1. Information on toxicological effects

Harmful if swallowed. **Acute toxicity**

Species Components **Test Results**

Disodium tetraborate pentahydrate (CAS 12179-04-3)

Acute

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)

Acute Dermal

Rabbit LD50 9530 mg/kg

Oral

LD50 Rat 5.89 g/kg

Due to partial or complete lack of data the classification is not possible. Skin corrosion/irritation Serious eye damage/eye

irritation

Due to partial or complete lack of data 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 data the classification is not possible. Germ cell mutagenicity Due to partial or complete lack of data the classification is not possible. Due to partial or complete lack of data the classification is not possible. Carcinogenicity Reproductive toxicity Due to partial or complete lack of data the classification is not possible. Due to partial or complete lack of data the classification is not possible.

Specific target organ toxicity -

single exposure

Specific target organ toxicity -

repeated exposure

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

Aspiration hazard Due to partial or complete lack of data the classification is not possible.

Mixture versus substance

information

No information available.

Material name: Comma Super Coldmaster Concentrate - Moove Lubricants Itd.

^{*} Estimates for product may be based on additional component data not shown.

Other information Not available.

SECTION 12: Ecological information

12.1. ToxicityBased on available data, the classification criteria are not met for hazardous to the aquatic

environment.

Product Species Test Results
Comma Super Coldmaster Concentrate

Aquatic

Fish LC50 Fish 4597.5938 mg/l, 96 hours estimated

Components Species Test Results

Disodium tetraborate pentahydrate (CAS 12179-04-3)

Aquatic

Fish LC50 Western mosquitofish (Gambusia affinis) 104 mg/l, 96 hours

Ethylene glycol (CAS 107-21-1)

Aquatic

Fish LC50 Fathead minnow (Pimephales promelas) 8050 mg/l, 96 hours

* Estimates for product may be based on additional component data not shown.

12.2. Persistence and

No data is available on the degradability of this product.

degradability

12.3. Bioaccumulative potential

Partition coefficient n-octanol/water (log Kow)

Ethylene glycol -1.36

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 effectsNo 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 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 packagingSince 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 codeThe 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 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.

IATA

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

Not established.

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

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended

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 major 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.

H319 Causes serious eye irritation. H360D May damage the unborn child.

H360F May damage fertility.

H373 May cause damage to organs through prolonged or repeated exposure.

Revision information Product and Company Identification: Alternate Trade Names **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.