

Safety Data Sheet

VALVECARE

1. Identification

Product identifier	VALVECARE
Product code	B31383
Other means of identification	Fuel additive.
Recommended use of the chemical and restrictions on use	Valve care.
Manufacturer	Maxquip Inc 6235A 86th Avenue SE Calgary, AB T2C 2S4 Tel. 1-866-Maxquip (629-7847) 403-258-3685 Fax 888-312-3625 www.maxquip.ca
Emergency phone number	Canutec: 613-996-6666

2. Hazard identification

Summary	FLAMMABLE LIQUID! Keep away from heat, sparks and open flame. Avoid all contact with skin, eyes and clothing. Do not breathe vapors, mists or aerosols. Do not ingest. If ingested consult physician immediately and show this Safety Data Sheet. Wear eye protection, gloves and other protective clothing that are adapted to the task being performed and the risks involved.
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WHMIS 2015/OSHA HCS 2012/GHS

Flammable liquids (Category 3)
 Skin corrosion/irritation (Category 2)
 Serious eye damage/eye irritation (Category 1)
 Skin sensitizer (Category 1)
 Carcinogenicity (Category 2)
 Specific target organ toxicity, single exposure (Category 3)
 Aspiration hazard (Category 1)



Other hazards which do not result in classification :
 Long-term hazard to the aquatic environment (Category 3).

DANGER

H226: Flammable liquid and vapour
 H318: Causes serious eye damage
 H304: May be fatal if swallowed and enters airways
 H315: Causes skin irritation
 H317: May cause an allergic skin reaction
 H336: May cause drowsiness or dizziness
 H351: Suspected of causing cancer
 H412: Harmful to aquatic life with long lasting effects
 P201: Obtain special instructions before use.

P202: Do not handle until all safety precautions have been read and understood.

P210: Keep away from heat, sparks, open flames and other ignition sources. No smoking.

P233: Keep container tightly closed.

P242: Use only non-sparking tools.

P261: Avoid breathing mist, vapors and spray.

P264: Wash face, hands and any exposed skin thoroughly after handling.

P271: Use only outdoors or in a well-ventilated area.

P272: Contaminated work clothing should not be allowed out of the workplace.

P273: Avoid release to the environment.

P280: Wear eye protection, gloves and other protective clothing that are adapted to the task being performed and the risks involved.

P301+P310+P331: IF SWALLOWED: Immediately call a POISON CENTER or a physician. Do NOT induce vomiting.

P303+361+353: IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water and soap or take a shower if necessary.

P363: Wash contaminated clothing before reuse.

P333+313: If skin irritation or a rash occurs: Get medical advice/attention.

P304+340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305+351+338: IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

P310: Immediately call a POISON CENTER or doctor/physician.

P370+378: In case of fire: Use chemical foam, dry chemical or carbon dioxide for extinction.

P403+P235+P233: Store in a well-ventilated place. Keep container tightly closed. Keep cool.

P405: Store locked up.

P501: Dispose of contents and container to a licensed chemical disposal agency in accordance with local, regional and national regulations.

3. Composition/information on ingredients

Common name	CAS	Weight % content
Naphtha (petroleum), hydrotreated heavy (C6-C13)	64742-48-9	43 - 48 %
Potassium docusate	7491-09-0	19 - 23 %
Distillates (Petroleum), Hydrotreated Light	64742-47-8	10 - 13 %
1-Propene, 2-methyl-, homopolymer, hydroformylation products, reaction products with ammonia	337367-30-3	5 - 9 %
Oxirane, ethyl-, homopolymer, monoisotridecyl ether	173140-85-7	3 - 7 %
Heavy normal paraffins concentrate (petroleum)	64771-72-8	3 - 5 %
Solvent naphtha (petroleum), heavy aromatic (C9-C16)	64742-94-5	2 - 5 %
Reaction mass of 2-tert-butyl-4,6-dimethylphenol and 4-tert-butyl-2,5-dimethylphenol	EC 911-254-5	0.5 - 2.5 %
2,6-Di-tert-butyl-p-cresol (BHT)	128-37-0	0.1 - 0.5 %
Naphthalene	91-20-3	0.1 - 0.5 %
Xylenol	1300-71-6	<0.1 %

4. First-aid measures

Inhalation	Move person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen by trained personnel. If a problem develops or persists, seek medical attention.
Skin contact	Flush with water for at least 15 minutes. Remove contaminated clothing and wash before reuse. Avoid touching eyes with contaminated body parts. If a problem develops or persists, seek medical attention.
Eye contact	IMMEDIATELY flush with plenty of water. Remove contact lenses. Flush with water for at least 15 minutes.

	Hold eyelids apart to rinse properly. If a problem develops or persists, seek medical attention.
Ingestion	DO NOT INDUCE VOMITING! If victim is conscious wash out mouth with water. Never give anything by mouth if victim is unconscious or convulsing. If spontaneous vomiting occurs, keep head below hips level to prevent aspiration into the lungs. Seek medical attention or contact a Poison Centre immediately.
Other	No information available.
Symptoms	May cause severe eye irritation or eye damage. May cause skin irritation. May cause an allergic reaction of the skin. High concentrations may cause central nervous system depression characterized by headache, dizziness, vertigo, nausea, drowsiness and fatigue.
Notes to the physician	Aspiration hazards into the lungs (ingestion/vomiting). Can enter lungs and cause damage. If lavage is performed, suggest endotracheal and/or esophageal control. Danger from lung aspiration must be weighed against toxicity when considering emptying the stomach. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

5. Fire-fighting measures

Suitable extinguishing media	Dry chemicals, chemical foam, carbon dioxide (CO ₂). Do not use direct water jet.
Specific hazards arising from the chemical	Flammable liquid and vapors. May be ignited by heat, sparks, flame or static electricity. Contact with strong oxidizers may cause fire. Floating liquid on water can travel to a source of ignition and spread fire.
Special protective equipment	Firefighters must wear self contained breathing apparatus with full face mask. Firefighting suit may not be efficient against chemicals.
Special protective actions for fire-fighters	Use water spray to cool fire-exposed containers. Prevent run-off from fire control or dilution from entering streams, sewers or drinking water supply.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Do not touch spilled material. Make sure to wear personal protective equipment mentioned in this Safety Data Sheet.
Environmental precautions	Prevent entry in sewer and other enclosed area.
Methods and materials for containment and cleaning up	Remove sources of ignition. Ventilate the area well. Stop leak, if it's possible to do so without risk. Make sure you have a fire extinguisher near you. Absorb with inert material (soil, sand, vermiculite) and place in an appropriate waste disposal clearly identified. Use non-sparkling and antistatic tools. Dispose via a licensed waste disposal contractor. Finish cleaning by rinsing with soapy water the contaminated surface.

7. Handling and storage

Precautions for safe handling	Keep away from heat, sparks and open flame. Avoid all sources of ignition. Use non-sparkling and antistatic tools. Avoid static electricity build up. Use only in well ventilated area. Do not breathe vapors, mists or aerosols. Avoid all contact with skin, eyes and clothing. Wear eye protection, gloves and other protective clothing that are adapted to the task being performed and the risks involved. Keep containers tightly closed when not used. Do not eat, do not drink and do not smoke during use. Wash hands, forearms and face thoroughly after handling this compound and before eating, drinking or using toilet articles. Remove contaminated clothing and wash before reuse.
Conditions for safe storage, including any	Storage and handling should follow the NFPA 30 Flammable and/or Combustible Liquids Code and the National Fire Code of Canada (NFCC). Store tightly close and in properly labelled containers in a

incompatibilities	cool, dry and well ventilated place. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Store away from oxidizing materials and incompatible materials (see section 10).
Storage temperature	<40°C (104°F)

8. Exposure controls/personal protection

Immediately Dangerous to Life or Health	No information available.				
Naphtha (petroleum), hydrotreated heavy (C6-C13)	TWA (8h)	Mist 300 ppm	5 mg/m ³	ACGIH OSHA	
Distillates (Petroleum), Hydrotreated Light	TWA (8h)		200 mg/m ³	ACGIH , BC, ON	
Naphthalene	STEL	15 ppm 15 ppm 15 ppm	78 mg/m ³ 79 mg/m ³	BC ON	
	TWA (8h)	10 ppm 10 ppm	52 mg/m ³	ACGIH , RSST BC , OSHA	
2,6-Di-tert-butyl-p-cresol (BHT)	TWA (8h)		2 mg/m ³	ACGIH , ON, RSST	
			10 mg/m ³	ACGIH , BC, ON RSST	
Appropriate engineering controls	Provide sufficient mechanical ventilation (general and/or local exhaust) to keep the airborne concentrations of vapors, mists, aerosols or dust below their respective occupational exposure limits.				
Individual protection measures					
Eye	If risk of contact with eyes wear chemical splash goggles. If respiratory hazards exist, a full face respirator may be required instead.				
Hands	Chemical-resistant, impervious gloves should be worn at all times when handling this chemical product. Wear nitrile or neoprene gloves. Before using, user should confirm impermeability. Discard gloves that show tears, pinholes, or signs of wear. Gloves must only be worn on clean hands. Wash gloves with water before removing them. After using gloves, hands should be washed and dried thoroughly. Disposable nitrile gloves can also be used, but discard after single use.				
Skin	Personal protective equipment for the body should be selected based on the task being performed and the risks involved. Wear normal work clothing covering arms and legs as required by employer code.				
Respiratory	Respiratory protection equipment (PPE) must be selected, fitted, maintained and inspected in accordance with regulations and CSA Standard Z 94.4 and approved by NIOSH / MSHA. In case of insufficient ventilation or in confined or enclosed space and for an assigned protection factor (APF) up to 10 times of exposure limit, wear a half mask respirator with organic vapors cartridges. For an APF until maximum 100 times of exposure limit, wear a full face mask respirator with organic vapors cartridges.				
Feet	Wear rubber boots to clean up a spill.				
 Goggles Nitrile gloves					

9. Physical and chemical properties

Physical state	Liquid	Flammability	Combustible
Colour	Clear	Flammability limits	N/Av.
Odour	Naphtha	Flash point	

			46 °C (114.8 °F) ASTM D93a closed cup
Odour threshold	N/Av.	Auto-ignition temperature	N/Av.
pH	N/Ap.	Sensibility to electrostatic charges	Yes
Melting point	N/Av.	Sensibility aux sparks and/or friction	No
Freezing point	N/Av.	Vapour density	N/Av. (Air = 1)
Boiling point	N/Av.	Relative density	0.86 kg/L @ 20 °C (68 °F) (Water = 1)
Solubility	N/Av.	Partition coefficient n-octanol/water	N/Av.
Evaporation rate	N/Av.	Decomposition temperature	N/Av.
Vapour pressure	N/Av.	Viscosity	<7 cSt @ 40 °C (104 °F)
Percent Volatile	54.5%	Molecular mass	N/Ap.
N/Av.: Not Available		N/Ap.: Not Applicable	Und.: Undetermined
		N/E: Not Established	

10. Stability and reactivity

Reactivity	No reaction expected.
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions (including polymerizations)	A dangerous reaction will not occur.
Conditions to avoid	Avoid heat, flame and sparks. Avoid static electricity build up. Avoid contact with incompatible materials.
Incompatible materials	Strong acids, strong oxidants.
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. Toxicological information

Numerical measures of toxicity	Naphtha (petroleum), hydrotreated heavy (C6-C13)	Ingestion >10000 mg/kg	Rat	LD50
	Distillates (Petroleum), Hydrotreated Light	Inhalation >5 mg/l/4h	Rat	LC50
	Heavy normal paraffins concentrate (petroleum)	Skin >3200 mg/kg	Rabbit	LD50
	Solvent naphtha (petroleum), heavy aromatic (C9-C16)	Ingestion >5000 mg/kg	Rat	LD50
	2,6-Di-tert-butyl-p-cresol (BHT)	Inhalation >10.2 mg/l/4h	Rat	LC50
	Naphthalene	Skin 3160 mg/kg	Rabbit	LD50
		Ingestion 5000 mg/kg	Rat	
		Skin 3000 mg/kg	Rabbit	
		Ingestion 7050 mg/kg	Rat	LD50
		Inhalation >5.2 mg/l/4h	Rat	LC50
		Skin >2000 mg/kg	Rat	LD50
		Ingestion 890 mg/kg	Rat	LD50
		Skin >2000 mg/kg	Rat	LD50
		Ingestion 2200 mg/kg	Rat	LD50

		354 mg/kg Inhalation >1 mg/l/1h Skin	Mouse LD50 Rat LC50 Rabbit LD50		
Likely routes of exposure	Skin, eyes, inhalation, ingestion.				
Delayed, immediate and chronic effects	Eye contact	May cause severe eye irritation or eye damage. Potassium docusate chemical family causes irreversible eye damage in rabbits (OECD TG 405), including turbidity of the cornea, as evaluated 21 days after treatment.			
	Skin contact	May cause redness and irritation of the skin. Potassium docusate chemical family causes skin irritation in rabbits (OECD TG 404), with effects still visible at 14 days. Prolonged or repeated exposure can cause skin drying, defatting and dermatitis.			
	Inhalation	Excessive inhalation is harmful. High concentrations may cause central nervous system depression characterized by headache, dizziness, vertigo, nausea, drowsiness and fatigue. The severity of symptoms may vary depending on exposure conditions. Numerous studies on human, especially from the monitoring of painters, suggest that long-term occupational exposure to white spirit (all types) cause chronic toxic encephalopathy (adverse central nervous system effects).			
	Ingestion	Harmful or fatal if inhaled into the lungs (ingestion/vomiting). May result in chemical pneumonitis and/or pulmonary edema. Signs of lung involvement include increased respiratory rate, increased heart rate, and a bluish discoloration of the skin. Coughing, choking and gagging are often noted at the time of aspiration.			
	Respiratory or skin sensitization	Reaction mass of 2-tert-butyl-4,6-dimethylphenol and 4-tert-butyl-2,5-dimethylphenol is a skin sensitizer (mice , OECD TG 429).			
	IRAC/NTP Classification	Common name IRAC NTP Naphtalène 2B R IARC : 1- Carcinogenic; 2A- Probably carcinogenic; 2B- Possibly carcinogenic. NTP : K- Known to be carcinogens; R- Reasonably anticipated to be carcinogens.			
	Carcinogenicity	Contains a substance that can cause cancer based on animal data. The risk of cancer depends on duration and level of exposure.			
	Teratogenicity	This material is not known to cause teratogenic effect.			
	Mutagenicity	This material is not known to cause mutagenic effect.			
	Reproductive toxicity	Potassium docusate chemical family was reported to cause developmental toxicity and teratogenicity, in rats following exposure via the oral route, in the presence of signs of marked maternal toxicity (OECD TG 414).			
Specific target organ toxicity - single exposure	No target organ is listed.				
	Specific target organ toxicity - repeated exposure	Central nervous system.			
Interactive effects	No information available for this product.				
Other information	The oral and skin acute toxicity estimates (ATE) of the mixture were calculated to be greater than 2000 mg/kg. These values are not classified according to WHMIS 2015 and OSHA HCS 2012.				

12. Ecological information

Ecological toxicity	Fish - <i>Oncorhynchus mykiss</i> - Rainbow trout LD50 1.9-9.8 mg/L; 96 h (Naphthalene)
Persistence	Contains an or many ingredients that may be persistent in aquatic environment.
Degradability	The product is a hydrocarbon mixture of which some ingredients are not readily biodegradable.
Bioaccumulative potential	Contains components that have a high potential to bioaccumulate.
Mobility in soil	

	The product is a hydrocarbon mixture of which some ingredients can evaporate into the air while others present a medium to low mobility in soil.
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Other adverse effects	Volatile organic chemical (VOC) compounds have the potential to form ozone and other air pollutants in near surface atmosphere (smog).
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13. Disposal considerations

Container 	Important! Prevent waste generation. Use in full. DO NOT throw residual to sewer, streams, sewers or drinking water supply. Residues and empty containers must be considered as hazardous waste. Dispose via a licensed waste disposal contractor. Observe all federal, state/provincial and municipal regulations. If necessary consult the Department of Environment or the relevant authorities.
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14. Transport information

UN Number	UN 1993
UN Proper Shipping Name	FLAMMABLE LIQUID, N.O.S. (Naphtha)
Environmental hazards	
Special precautions for user	No information available for this product.
TDG - Transportation of Dangerous Goods (Canada)	
Transport hazard class(es)	 Class 3
Packing group	III
Emergency response guidebook 2012	128
IMO/IMDG - International Maritime Transport	
Classification	Regulated UN 1993. FLAMMABLE LIQUID, N.O.S. (Naphtha) Class 3, PG III. Emergency schedules (EmS-No) F-E, S-E
IATA - International Air Transport Association	
Classification	Regulated UN 1993. FLAMMABLE LIQUID, N.O.S. (Naphtha) Class 3, PG III.
These transportation classifications are provided as a customer service. As the shipper YOU remain responsible for complying with all applicable laws and regulations, including proper transportation classification and packaging. In addition, if a domestic exemption exists, it is the responsibility of the shipper to define the application of it.	

15. Regulatory information

CANADA

Common name	CAS	CEPA	DSL	NDSL	NPRI
Naphtha (petroleum), hydrotreated heavy (C6-C13)	64742-48-9		X		X
Potassium docusate	7491-09-0		X		
Distillates (Petroleum), Hydrotreated Light	64742-47-8		X		X
1-Propene, 2-methyl-, homopolymer, hydroformylation products, reaction products with ammonia	337367-30-3				
Oxirane, ethyl-, homopolymer, monoisotridecyl ether	173140-85-7				

Heavy normal paraffins concentrate (petroleum)	64771-72-8		X		
Solvent naphtha (petroleum), heavy aromatic (C9-C16)	64742-94-5		X		X
Reaction mass of 2-tert-butyl-4,6-dimethylphenol and 4-tert-butyl-2,5-dimethylphenol	EC 911-254-5				
2,6-Di-tert-butyl-p-cresol (BHT)	128-37-0		X		X
Naphthalene	91-20-3		X		X
Xylenol	1300-71-6		X		

- CEPA: List of Toxic Substances Managed Under Canadian Environmental Protection Act

- DSL: Domestic Substances List Inventory

- NDSL: Non-Domestic Substances List Inventory

- NPRI: National Pollutant Release Inventory Substances

UNITED STATE OF AMERICA

Common name	CAS	TSCA	CERCLA	EPCRA 313	EPCRA 302/304	CAA 112(b) HON	CAA 112(b) HAP	CAA 112(r)	CWA 311	CWA Priority
Naphtha (petroleum), hydrotreated heavy (C6-C13)	64742-48-9	X								
Potassium docusate	7491-09-0									
Distillates (Petroleum), Hydrotreated Light	64742-47-8	X								
1-Propene, 2-methyl-, homopolymer, hydroformylation products, reaction products with ammonia	337367-30-3									
Oxirane, ethyl-, homopolymer, monoisotridecyl ether	173140-85-7									
Heavy normal paraffins concentrate (petroleum)	64771-72-8									
Solvent naphtha (petroleum), heavy aromatic (C9-C16)	64742-94-5	X								
Reaction mass of 2-tert-butyl-4,6-dimethylphenol and 4-tert-butyl-2,5-dimethylphenol	EC 911-254-5									
2,6-Di-tert-butyl-p-cresol (BHT)	128-37-0	X								
Naphthalene	91-20-3	X	X	X		X	X		X	X
Xylenol	1300-71-6	X	X			X			X	

- TSCA: Toxic Substance Control Act

- CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act list of hazardous substances

- EPCRA 313: Emergency Planning and Community Right-to-Know Act, Section 313 Toxic Chemicals

- EPCRA 302/304: Emergency Planning and Community Right-to-Know Act, Section 302/304 Extremely Hazardous Substances

- CAA 112(b) HON: Clean Air Act - Hazardous Organic National Emission Standard for Hazardous Air Pollutant

- CAA 112(b) HAP: Clean Air Act - Hazardous Air Pollutants lists pollutants

- CAA 112(r): Clean Air Act - Regulated Chemicals for Accidental Release Prevention

- CWA 311: Clean Water Act - List of Hazardous Substances

- CWA Priority: Clean Water Act - Priority Pollutant list

California Proposition 65

Common name	CAS	Cancer	Reproductive and Developmental Toxicity
Naphthalene	91-20-3	X	
Other regulations			

WHMIS 1988

B3 D2A D2B

Class B3 : Combustible Liquid

Class D2A : Very toxic material causing other toxic effects

Class D2B : Toxic material causing other toxic effects

HMIS

<input type="radio"/>	Health
<input type="radio"/>	Flamability
<input type="radio"/>	Reactivity
<input type="radio"/>	Protective Equipment

NFPA**16. Other information**

Date (YYYY-MM-DD)	Maxquip Inc 2015-12-01
Version	01
Other information	<p>REFERENCES:</p> <ul style="list-style-type: none"> - Service du répertoire toxicologique de la Commission de la santé et de la sécurité du travail (CSST), http://www.reptox.csst.qc.ca - IUCLID Chemical Dataset, European chemical Substances Information System (ESIS), Joint Research Centre, http://esis.jrc.ec.europa.eu - White Spirits, Fiche Toxicologique FT94, Institut National de Recherche et de Sécurité, http://www.inrs.fr - European Chemical Agency ECHA, http://echa.europa.eu/information-on-chemicals - IPCS INCHEM, Chemical Safety Information from Intergovernmental Organizations, Canadian Centre for Occupational Health and Safety (CCOHS), Copyright International Programme on Chemical Safety (IPCS), http://www.inchem.org <p>ACGIH: American Conference of Governmental Industrial Hygienists AIHA: American Industrial Hygiene Association HMIS: Hazardous Materials Identification System NFPA: National Fire Protection Association OSHA: Occupational Safety and Health Administration (USA) NIOSH: National Institute for Occupational Safety and Health NTP: National Toxicology Program RSST: Règlement sur la santé et la sécurité du travail (Québec) GHS: Globally Harmonized System IARC: International Agency for Research on Cancer IDLH: Immediately Dangerous to Life or Health STEL: Short Term Exposure Limit (15 min) TWA: Time Weighted Averages WHMIS: Workplace Hazardous Materials Information System</p> <p>To the best of our knowledge, the information contained herein is accurate. However, neither Préventis System nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.</p>