Nouryon

SAFETY DATA SHEET

according to the Globally Harmonized System and US regulation

ARMOCARE VGH-70

Version 1	Revision Date 0	7/23/2018	Print Date 08/05	US / Z8
1. IDENTIFIC	CATION			
Product	name	: ARMOC	ARE VGH-70	
Product	Use Description	: Specific	· · /	Conditioners Surfactant
Compar	у	525 Wes	Surface Chemistry L st Van Buren IL 60607	LC
Telepho	ne	: +180090		
Fax E-mail a	address	: +131254	47188	
	ncy telephone	: CANUTE	C: +1 613-996-6666	CHEMTREC: +1 800-424-9300

2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance	Pastilles
Color	white
Odor	No information available.
Hazard Summary	Risk of dust explosion.

GHS Classification

Acute aquatic toxicity, Category 2

GHS label elements

Hazard Statements	: H401 Toxic to aquatic life.
Precautionary Statements	 Prevention: P273 Avoid release to the environment. Disposal: P501 Dispose of contents/ container to an approved waste disposal plant.
Carcinogenicity:	
IARC	: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
OSHA	: No component of this product present at levels greater than or

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NTP	: No comp equal to	0.1% is on OSHA's list of regulated car ponent of this product present at levels 0.1% is identified as a known or anticip en by NTP.	greater than or

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3. COMPOSI	TION/INFORMATION ON INGRED	IENTS	

3. COMPOSITION/INFORMATION ON INGREDIENTS

Pure substance/mixture : Mixture

Hazardous ingredients

Chemical name	CAS-No.	Classification	Concentration [% W/W]
Propylene glycol	57-55-6		>= 20 - < 30

4. FIRST AID MEASURES

General advice	:	No hazards which require special first aid measures.
Inhalation	:	Remove to fresh air. Rinse nose and mouth with water.
Skin contact	:	Take off contaminated clothing and shoes immediately. Wash the skin immediately with soap and water.
Eye contact	:	Rinse with plenty of water. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.
Ingestion	:	Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.
Notes to physician		
Symptoms	:	The symptoms and effects are as expected from the hazards as shown in section 2. No specific product related symptoms are known.
Risks	:	No information available.
Treatment	:	Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.	
Specific hazards during fire fighting / Specific hazards arising from the chemical	: Risks of ignition followed by flame propagation or secondary explosions shall be prevented by avoiding accumulation of dust, e.g. on floors and ledges.	
Combustion products	: Carbon oxides Nitrogen oxides (NOx) Halogenated compounds Hydrogen chloride	
Special protective equipment for fire-fighters	: In the event of fire, wear self-contained breathing apparatus.	

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Further i	nformation	must not Fire resid	ontaminated fire extinguishing water se be discharged into drains. ues and contaminated fire extinguishir ed of in accordance with local regulati	ng water must

See also Section 9. Physical and chemical properties: Safety data

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protections	tive equipment and emergency procedures : Avoid dust formation.
Emergency measures on accidental release	: Evacuate personnel to safe areas. Only qualified personnel equipped with suitable protective equipment may intervene. Prevent unauthorized persons entering the zone.
Environmental precautions	: If the product contaminates rivers and lakes or drains inform respective authorities.
Methods for cleaning up / Methods for containment	: Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.
Reference to other sections	: For disposal considerations see section 13.
	For personal protection see section 8.

7. HANDLING AND STORAGE

Handling		
Advice on safe handling	 For personal protection see section 8. Avoid creating dust. Keep away from heat/sparks/open flames/hot surfaces. No smoking. Dispose of rinse water in accordance with local and national regulations. No special handling advice required. 	
Advice on protection against fire and explosion	 Provide appropriate exhaust ventilation at places where dust is formed. No sparking tools should be used. 	
Storage Requirements for storage areas and containers	: Store in original container. Keep in a dry place. Store between 40-77°F (5-25°C). Keep container tightly closed.	
Advice on common storage	: No special restrictions on storage with other products.	
Other data	: No decomposition if stored and applied as directed.	

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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Version 1

Ingredients with workplace control parameters

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Ingredients	CAS-No.	Value		Control parameters	Update	Basis	Form of exposure
Propylene glycol	57-55-6	TWA	1(0 mg/m3	2008-01-01	US WEEL	
Dust		TWA		0 Million particles er cubic foot	2011-07-01	OSHA Z-3	total dust
	Further information	: a: Base d: All ine listed sp same as 1.		Based on impinger samples counted by light-field techniques. All inert or nuisance dusts, w hether mineral, inorganic, or organic, not ted specifically by substance name are covered by this limit, w hich is the ame as the Particulates Not Otherw ise Regulated (PNOR) limit in Table Z- ppcf X 35.3 = million particles per cubic meter = particles per c.c			
Dust		TWA	1	5 mg/m3	2011-07-01	OSHA Z-3	total dust
	Further information	lis	ted sp ame as	ert or nuisance dus becifically by substa the Particulates N	ance name are co	vered by this limi	t, which is the
Dust		TWA	5	mg/m3	2011-07-01	OSHA Z-3	respirable fraction
	Further information	lis	ted sp ame as	ert or nuisance dus becifically by substa the Particulates N	ance name are co	vered by this limi	t, which is the
Dust		TWA		5 Million particles er cubic foot	2011-07-01	OSHA Z-3	respirable fraction
	Further information	d: lis sa 1.	All ine ted sp ame as	d on impinger samper ert or nuisance dus becifically by substa the Particulates N 35.3 = million part	ts, w hether miner ance name are co lot Otherw ise Reg	al, inorganic, or o vered by this limi gulated (PNOR) 1	organic, not t, which is the imit in Table Z-

ACGIH: American Conference of Governmental Industrial Hygienists

BEI: Biological Exposure Index

MAC: Maximum Allowable Concentration

NIOSH: National Institute for Occupational Safety and Health

OEL: OEL: Occupational exposure limit.

STEL: Short term exposure limit

TWA: Time Weighted Average

Occupational exposure limits of decomposition products

Decomposition products	CAS-No.	Value	Control parameters	Update	Basis	Form of exposure
Hydrogen chloride	7647-01-0, 7647-01-0	С	2 ppm	2007-01-01	ACGIH	
	Further information		์ irr: Upper Respiratory Not classifiable as a hเ			
		С	5 ppm 7 mg/m3	2013-10-08	NIOSH REL	
	Further information	: Ofte	n used in an aqueous	solution.		
		С	5 ppm 7 mg/m3	2006-02-28	OSHA Z-1	
	Further information		The value in mg/m3 is Ceiling limit is to be de			samples.
		С	5 ppm 7 mg/m3	1989-01-19	OSHA P0	
		PEL	0.3 ppm	2014-11-26	CAL PEL	

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I		0.45 mg/m3	1	1	1
	С	2 ppm	2014-11-26	CAL PEL	
Appropriate engineering Provide appropriate exhaus		at places where	dust is formed.		
Personal protective equip	oment				
Eye/face protection		y fitting safety g	oggles		
Hand protection	: Glove	e material: Neopr	ene		
	: Glove	e material: Nitrile	rubber		
Skin and body protection	: Prote	ctive suit			
Respiratory protection	requir In the with a	ersonal respirato red. e case of dust, va an approved filter mask with a parti	por or aerosol fo	ormation use	-
Hygiene measures	practi	le in accordance ice. n hands before b	-		-
Environmental exposure	controls				
General advice	: If the	product contami ective authorities.		lakes or draii	ns inform
IYSICAL AND CHEMICAL	PROPERTIE	ES			
Appearance					

Appearance	
Form	: Pastilles
Color	: white
Odor	: No information available.
Odor Threshold	: No data available
Safety data	
рH	: neutral
Melting point/freezing point	: 60 °C
Boiling point/boiling range	: Not applicable
Flash point	: 100 - 199 °C
Ignition temperature	: >100 °C
Evaporation rate	: No data available
Flammability (solid, gas)	: No data available

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Flammabili	ty (liquids)	:	Not applicable		
Lower expl	losion limit	:	No data available		
Upper expl	losion limit	:	No data available		
Vapor pres	sure	:	< 1 hPa at 20 °C		
Relative va	por density	:	Not applicable		
Density		:	950 kg/m3 at 70 °C		
Relative de	ensity	:	No data available		
Bulk densit	ty	:	500 kg/m3		
Water solu	bility	:	dispersible		
Solubility in	n other solvents	:	Soluble in ethanol and	d 2-propanol.	
Partition co octanol/wa	pefficient: n- ter	:	No data available		
Autoignitio	n temperature	:	> 300 °C		
Decompos	ition temperature	:	No data available		
Viscosity, o	dynamic	:	at 20 °C Not applicable		
Viscosity, I	kinematic	:	at 20 °C Not applicable		
Explosive	properties	:	Not explosive		
Oxidizing p	properties	:	The substance or mix	ture is not classified as oxidi	zing.

This material safety datasheet only contains information relating to safety and does not replace any product information or product specification.

10. STABILITY AND REACTIVITY

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Conditions to avoid	: None known.
Materials to avoid	: None known.
Hazardous decomposition products	: Halogenated compounds Hydrogen chloride
Thermal decomposition	: No data available
Reactivity	: Stable under normal conditions.
Chemical stability	: Stable under recommended storage conditions.
Hazardous reactions	: Dust may form explosive mixture in air.

OSHA

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TOXICOLOGICAL INFORMAT	ΓΙΟΝ		
PRODUCT INFORMATION:			
Hazard Summary Acute toxicity	: Not clas	sified based on available information.	
Skin corrosion/irritation	: Not clas	sified based on available information.	
Serious eye damage/eye irritation	: Not clas	sified based on available information.	
Respiratory or skin sensitization	informat	nsitization: Not classified based on avai	
Germ cell mutagenicity	: Not clas	sified based on available information.	
Carcinogenicity	: Not clas	sified based on available information.	
Reproductive toxicity	: Not clas	sified based on available information.	
STOT-single exposure	: Not clas	sified based on available information.	
STOT-repeated exposure	: Not clas	sified based on available information.	
Aspiration hazard	: Not clas	sified based on available information.	
Potential Health Effects Inhalation	: Product	dust may be irritating to respiratory sys	tem.
Skin	: Product	dust may be irritating to skin.	
Eyes	: Product	dust may be irritating to eyes.	
Ingestion	: May be h	narmful if swallowed.	
Aggravated Medical Condition	: None kn	own.	
Symptoms of Overexposure		ptoms and effects are as expected from n in section 2. No specific product relate n.	
Toxicology Assessment Further information	: No furthe	r data available.	
Test result Acute oral toxicity		kicity estimate: 3,571 mg/kg Calculation method	
Carcinogenicity:			
IARC	equal to	dient of this product present at levels g 0.1% is identified as probable, possible arcinogen by IARC	

human carcinogen by IARC. : No component of this product present at levels greater than or

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NTP	:	No compo equal to (0.1% is on OSHA's list of regulated car onent of this product present at levels 0.1% is identified as a known or anticip n by NTP.	greater than or
TOXICOL	OGY DATA FOR THE	INGREDIE	NTS:	
Test resu	ılt			
Compone Acute ora	ent: Propylene glycol al toxicity :	LD50: 19 Species: Literature		
Acute der	rmal toxicity :	LD50: 20 Species: Literature		
PRODUC	T INFORMATION:			
	5	unprofess	nmental hazard cannot be excluded in ional handling or disposal. iquatic life.	the event of
Test resu	ılt			
Ecotoxic Toxicity t	ity effects o fish :	Species:	time: 96 h	
Eliminati Bioaccum	ion information (persist nulation :	t ence and No data a		
Mobility	:	No data a	vailable	
Biodegrad	dability :	Result: R	eadily biodegradable.	
		No data a	vailable	
Hazardo Regulatio	us to the ozone layer n		Protection of Environment; Part 82 Prot eric Ozone - CAA Section 602 Class I	
Remarks	:	This prod	uct neither contains, nor was manufact Class II ODS as defined by the U.S. (tured with a

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		S	Section 602 (40 CFR 82, Subpt. A, App.A + B).	
INC	GREDIENTS:			
Tes	st result			
<u>Co</u>	mponent: Propylene glycol	L		
	otoxicity effects kicity to fish	E	C50: 46,500 - 54,900 mg/l Exposure time: 96 h Species: Pimephales promelas (fathead minnow)	
	kicity to daphnia and other uatic invertebrates	E S	C50: 34,400 mg/l Exposure time: 48 h Species: Daphnia magna (Water flea) iterature data.	
То	kicity to algae	E	C50: 19,000 mg/l Exposure time: 72 h Species: algae	
Bic	mination information (persi paccumulation	: B B	Bioconcentration factor (BCF): < 1 Bioaccumulation is unlikely.	
Мо	bility	: N	lo data available	
Bic	odegradability	: R	Result: Readily biodegradable.	
Bic De	rther information on ecolog ochemical Oxygen mand (BOD)		lo data available	
	POSAL CONSIDERATIONS	. т	he product should not be allowed to opter drains, water	
PIC	Jauci	c D c D	he product should not be allowed to enter drains, water ourses or the soil. To not contaminate ponds, waterways or ditches with hemical or used container. Dispose of contents/container in accordance with local egulation.	
			Vaste must be disposed of in accordance with federal, stand local environmental control regulations.	ate
Co	ntaminated packaging	D E	mpty remaining contents. Dispose of as unused product. Empty containers should be taken to an approved waste andling site for recycling or disposal.	

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14. TRANSPORT INFORMATION

International Regulations

ADR

Not regulated as a dangerous good

UNRTDG

Not regulated as a dangerous good

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

Further information for transport

Not classified as dangerous in the meaning of transport regulations.

Domestic regulation

49 CFR Not regulated as a dangerous good TDG Not regulated as a dangerous good NOM-002-SCT Not regulated as a dangerous good

15. REGULATORY INFORMATION

Notification status

DSL	: NO. This product contains one or several components that are not on the Canadian DSL nor NDSL.
AICS	: YES. On the inventory, or in compliance with the inventory
NZIoC	: YES. On the inventory, or in compliance with the inventory
ENCS	: NO. Not in compliance with the inventory
ISHL	: NO. Not in compliance with the inventory
KECI	: NO. Not in compliance with the inventory
PICCS	: NO. Not in compliance with the inventory
IECSC	: YES. On the inventory, or in compliance with the inventory
TCSI	: YES. On the inventory, or in compliance with the inventory
TSCA	: e (special case). For Cosmetic Use Only

For explanation of abbreviations, see section 16.

TSCA list

TSCA 5(a)(2)	: No substances are subject to a Significant New Use Rule.
TSCA 12(b)	: No substances are subject to TSCA 12(b) export notification
	requirements.

EPCRA - Emergency Planning and Community Right-to-Know

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

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SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards	:	No SARA Hazards
SARA 302	:	This material does not contain any components with a section 302 EHS TPQ.
SARA 313	:	This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals subject to disclosure and listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489):

57-55-6 20 - 30 %

Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

California Prop. 65

WARNING:

This product can expose you to chemicals including Chloromethane, which is/are known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

16. OTHER INFORMATION

Full text of other abbreviations

ACGIH	:	USA. ACGIH Threshold Limit Values (TLV)
CAL PEL		California permissible exposure limits for chemical contaminants (Title 8, Article 107)
NIOSH REL	:	USA. NIOSH Recommended Exposure Limits
OSHA PO	-	USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000
OSHA Z-1		USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
OSHA Z-3		USA. Occupational Exposure Limits (OSHA) - Table Z-3 Mineral Dusts
US WEEL	:	USA. Workplace Environmental Exposure Levels (WEEL)

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ACGIH / CAL PEL CAL PEL NIOSH F OSHA P OSHA Z- OSHA Z-	C ./PEL ./C REL/C D/C 1/C 3/TWA	307/23/2 : : : : :	Ceiling Permiss Ceiling Ceiling Ceiling Ceiling	limit sible exposure limit value not be exceeded at any tin limit	ne.
US WEE	L / TWA	:	8-hr TV	VA	

AICS - Australian Inventory of Chemical Substances; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR -Carcinogen. Mutagen or Reproductive Toxicant: CPR - Controlled Products Regulations: DIN -Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx -Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS -Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China: IMDG - International Maritime Dangerous Goods: IMO -International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO -International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 -Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC -New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

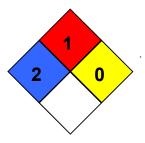
Further information

HMIS Classification

: Health Hazard: 2 Flammability: 1 Physical hazards: 0

NFPA Classification

: Health Hazard: 2 Fire Hazard: 1 Reactivity Hazard: 0



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REACH	1907/2006 (EU)
DSL	Canadian Domestic Substances List (DSL)
AICS	Australia Inventory of Chemical Substances (AICS)
NZIOC	New Zealand. Inventory of Chemical Substances
ENCS	Japan. ENCS - Existing and New Chemical Substances Inventory
ISHL	Japan. ISHL - Inventory of Chemical Substances
KECI	Korea. Korean Existing Chemicals Inventory (KECI)
PICCS	Philippines Inventory of Chemicals and Chemical Substances
	(PICCS)
IECSC	China. Inventory of Existing Chemical Substances in China (IECSC)
TCSI	Taiwan Chemical Substance Inventory (TCSI)
TSCA	United States TSCA Inventory

Notification status explanation

Further information

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The information in this material safety data sheet should be provided to all who will use, handle, store, transport or otherwise be exposed to this product. The user must determine the appropriate measures that need to be implemented for the use and handling of this product in the c ontext of the user's operations and use of this product. The information contained herein supersedes all previously issued bulletins on the subject matter covered. If the date on this document is more than three years old, call to make certain that this sheet is current. No warranty is made as to the product's merchantability or fitness for any particular purpose, or that any suggested use will not infringe any patent. User must determine for himself, by preliminary tests or otherwise, the suitability of this product for his purposes, including mixing with other products. Nothing contained herein shall be construed as granting or extending any license under any patent.

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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