ALKASURF CO 430

Revision Date 11/10/2016

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

1.1 Product identifier

- Trade name ALKASURF CO 430

1.2 Relevant identified uses of the substance or mixture and uses advised against

Uses of the Substance / Mixture

- Surfactants for various applications

1.3 Details of the supplier of the safety data sheet

Company

Solvay Canada Inc.,
NOVECARE
Brookfield Place, Suite 4400
181 Bay Street
Toronto, ON, M5J2T-3, CA
Telephone number: 800-973-7873

1.4 Emergency telephone

FOR EMERGENCIES INVOLVING A SPILL, LEAK, FIRE, EXPOSURE OR ACCIDENT CONTACT: CHEMTREC 800-424-9300 within the United States and Canada, or 703-527-3887 for international collect calls.

SECTION 2: Hazards identification

Although WHMIS has not adopted the environmental portion of the GHS regulations, this document may include information on environmental effects

2.1 Classification of the substance or mixture

Hazardous Products Regulations (WHMIS 2015)

Skin irritation, Category 2	H315: Causes skin irritation.
Eye irritation, Category 2B	H320: Causes eye irritation.

2.2 Label elements

Hazardous Products Regulations (WHMIS 2015)

Pictogram

Signal Word

- Warning

Hazard Statements

- H315 + H320 Causes skin and eye irritation.

Precautionary Statements

Prevention

- P264 Wash skin thoroughly after handling.
- P280 Wear protective gloves.

Response

-	P302 + P352	IF ON SKIN: Wash with plenty of water.
-	P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
-	P332 + P313	If skin irritation occurs: Get medical advice/ attention.
-	P337 + P313	If eye irritation persists: Get medical advice/ attention.
-	P362 + P364	Take off contaminated clothing and wash it before reuse.

2.3 Other hazards which do not result in classification

- H401: Toxic to aquatic life.
- H411: Toxic to aquatic life with long lasting effects.

- Does NOT present any particular fire hazard.
- On combustion, toxic gases are released.
- Hazardous reactions may occur on contact with certain chemicals. (Refer to the list of incompatible materials section 10: "Stability-Reactivity").
- May cause sensitization by skin contact.

SECTION 3: Composition/information on ingredients

3.1 Substance

- Chemical nature Nonyl phenoxy (polyethyleneoxy)ethanol

WHMIS Hazardous Ingredients and Impurities

Chemical name	Identification number CAS-No.	Concentration [% wt/wt or V/V]
Ethoxylated Nonylphenol, Branched	68412-54-4	>= 99 - <= 100

3.2 Mixture

Not applicable, this product is a substance.

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice

- Show this material safety data sheet to the doctor in attendance.
- First responder needs to protect himself.
- Place affected apparel in a sealed bag for subsequent decontamination.

In case of inhalation

- Negligible or unlikely exposure pathways
- Move to fresh air in case of accidental inhalation of vapors.
- If symptoms persist, call a physician.

In case of skin contact

- Wash off immediately with plenty of water for at least 15 minutes.
- If a person feels unwell or symptoms of skin irritation appear, consult a physician.
- Remove contaminated clothing and shoes.
- Wash contaminated clothing before re-use.

In case of eye contact

- Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
- If eye irritation persists, consult a physician.

In case of ingestion

- If victim is conscious:
- Rinse mouth with water.
- Keep at rest.

- Do not induce vomiting without medical advice.
- Do not leave the victim unattended.
- Vomiting may occur spontaneously
- Risk of product entering the lungs on vomiting after ingestion.
- Lay victim on side.
- Seek medical advice.

4.2 Most important symptoms and effects, both acute and delayed

Effects

- Skin contact may aggravate existing skin disease
- Inhalation of product may aggravate existing chronic respiratory problems such as asthma, emphysema or bronchitis

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician

- All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

- Treat symptomatically.
- There is no specific antidote available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

- Dry chemical
- Carbon dioxide (CO2)
- Foam

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire fighting

- Under fire conditions:
- Will burn
- Hazardous decomposition products formed under fire conditions.

Hazardous combustion products:

- On combustion or on thermal decomposition (pyrolysis), releases:
- Carbon oxides

5.3 Advice for firefighters

Special protective equipment for fire-fighters

- Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing.

Specific fire fighting methods

- Cool containers/tanks with water spray.

Further information

- Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
- Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- Avoid contact with the skin and the eyes.
- Keep away from flames and sparks.
- Remove all sources of ignition.
- Ventilate the area.
- Wear suitable protective equipment.
- For personal protection see section 8.

6.2 Environmental precautions

- Take all necessary measures to avoid accidental discharge of products into drains and waterways due to the rupture of containers or transfer systems.
- Spills may be reportable to the National Response Center (800-424-8802) and to state and/or local agencies

Risk Management Measures to control aqueous release

- Do not flush into surface water or sanitary sewer system.

6.3 Methods and materials for containment and cleaning up

Recovery

- Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).
- Sweep up or vacuum up spillage and collect in suitable container for disposal.
- Never return spills in original containers for re-use.

Decontamination / cleaning

- Wash with plenty of water and detergent.
- Wash nonrecoverable remainder with large amounts of water.
- Recover the cleaning water for subsequent disposal.
- Decontaminate tools, equipment and personal protective equipment in a segregated area.

Disposal

- Dispose of in accordance with local regulations.

Methods for containment

- Keep in properly labeled containers.
- Keep in suitable, closed containers for disposal.

Additional advice

- Material can create slippery conditions.

6.4 Reference to other sections

- 7. HANDLING AND STORAGE
- 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
- 13. DISPOSAL CONSIDERATIONS

SECTION 7: Handling and storage

7.1 Precautions for safe handling

- Non-sparking tools should be used.
- Ensure all equipment is electrically grounded before beginning transfer operations.

- Handle in accordance with good industrial hygiene and safety practice.
- Avoid splashes.
- Avoid inhalation, ingestion and contact with skin and eyes.
- Avoid localized overheating.
- Vent drums while heating
- Mix thoroughly before use.
- Ethylene oxide may collect in container head space.
- Provide adequate ventilation.

Hygiene measures

- Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this materials:
- 1) Do not store, use, and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored.
- 2) Wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics, or using the toilet.
- 3) Wash exposed skin promptly to remove accidental splashes or contact with material.

- Use clean, well maintained personal protection equipment.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures/Storage conditions

- Does not require any specific or particular measures.

- Keep container tightly closed in a dry and well-ventilated place.

- Keep away from incompatible materials to be indicated by the manufacturer
- Keep away from open flames, hot surfaces and sources of ignition.
- Keep away from direct sunlight.

Requirements for storage rooms and vessels

Recommended storage temperature: 59 - 120 °F (15 - 49 °C)
- Freezing will affect the physical condition but will not damage the material. Thaw and mix before using.
- Low pressure steam or a water bath may be used to melt solidified material
- For further information, refer to section 10: "Stability and Reactivity."

7.3 Specific end use(s)

- no data available

SECTION 8: Exposure controls/personal protection

Introductory Remarks: These recommendations provide general guidance for handling this product. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. Assistance with selection, use and maintenance of worker protection equipment is generally available from equipment manufacturers.

8.1 Control parameters

- Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Control measures

Engineering measures

- Where engineering controls are indicated by use conditions or a potential for excessive exposure exists, the following traditional exposure control techniques may be used to effectively minimize employee exposures :

- Effective exhaust ventilation system

Individual protection measures

Respiratory protection

- When respirators are required, select NIOSH/MSHA approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industrial recommendations.
- No personal respiratory protective equipment normally required.

Hand protection

- Where there is a risk of contact with hands, use appropriate gloves
- Gloves must be inspected prior to use.
- Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.

Eye protection

- Eye and face protection requirements will vary dependent upon work environment conditions and material handling practices. Appropriate ANSI Z87 approved equipment should be selected for the particular use intended for this material.
- Eye contact should be prevented through the use of:

- Safety glasses with side-shields

Skin and body protection

- Protective suit
- Impervious clothing
- Footwear protecting against chemicals

Hygiene measures

- Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this materials:
- 1) Do not store, use, and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored.
- 2) Wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics, or using the toilet.
- 3) Wash exposed skin promptly to remove accidental splashes or contact with material.

- Use clean, well maintained personal protection equipment.

Protective measures

- Selection of appropriate personal protective equipment should be based on an evaluation of the performance characteristics of the protective equipment relative to the task(s) to be performed, conditions present, duration of use, and the potential hazards, and/or risks that may occur during use.
- Ensure that eyewash stations and safety showers are close to the workstation location.
- Emergency equipment immediately accessible, with instructions for use.
- The protective equipment must be selected in accordance with current local standards and in cooperation with the supplier of the protective equipment.

SECTION 9: Physical and chemical properties

Physical and Chemical properties here represent typical properties of this product. Contact the business area using the Product information phone number in Section 1 for its exact specifications.

9.1 Information on basic physical and chemical properties

Appearance	Physical state: liquid Color: colorless to pale yellow.
Odor	aromatic
Odor Threshold	no data available
pH	6.0 - 8.0 (10 % (m/v))
Melting point/freezing point	no data available
Initial boiling point and boiling range	Boiling point/boiling range: > 392 °F (> 200 °C)
Flash point	> 200 °F (> 93 °C) closed cup Flammability class: Will burn
Evaporation rate (Butylacetate = 1)	no data available
Flammability (solid, gas)	no data available
Flammability (liquids)	no data available
Flammability / Explosive limit	no data available
Autoignition temperature	no data available
Vapor pressure	no data available
Vapor density	no data available
Density	ca. 1.02 g/cm3 (77 °F (25 °C))
Relative density	no data available
Solubility	Water solubility: practically insoluble Solubility in other solvents: common organic solvents : soluble
Partition coefficient: n-octanol/water	Not applicable, Surface-Active.
Decomposition temperature	no data available
Viscosity	no data available
Explosive properties	no data available
Oxidizing properties	Not considered as oxidizing., Structure-activity relationship (SAR)

9.2 Other information

no data available

SECTION 10: Stability and reactivity

10.1 Reactivity

- Stable at normal ambient temperature and pressure.

10.2 Chemical stability

- Stable under normal conditions.
- Stable under recommended storage conditions.
- See chapter
- 7. HANDLING AND STORAGE

10.3 Possibility of hazardous reactions

- No dangerous reaction known under conditions of normal use.

Polymerization
- Hazardous polymerization does not occur.

10.4 Conditions to avoid

- Keep away from flames and sparks.
- Keep away from heat and sources of ignition.

10.5 Incompatible materials

- Strong acids
- Strong bases
- Strong oxidizing agents
- Strong reducing agents

10.6 Hazardous decomposition products

- On combustion or on thermal decomposition (following the evaporation of water) releases:
- (Carbon oxides (CO + CO2)).

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Acute oral toxicity	LD50 : > 5,000 mg/kg - Rat Unpublished internal reports
Acute inhalation toxicity Ethoxylated Nonylphenol, Branched	no data available
Acute dermal toxicity	LD50 > 2,000 mg/kg - Rabbit Published data
Acute toxicity (other routes of administration)	no data available

Skin corrosion/irritation

Rabbit
Irritating to skin.
Unpublished internal reports

Serious eye damage/eye irritation

Ethoxylated Nonylphenol, Branched

Mild eye irritation
CESIO

Respiratory or skin sensitization

Repeated Insult Patch Test - Humans
Certain reactions were observed for sensitive people
Diluted product
Unpublished internal reports

Mutagenicity

Genotoxicity in vitro

Ethoxylated Nonylphenol, Branched

category approach
Product is not considered to be genotoxic

Genotoxicity in vivo

no data available

Carcinogenicity

Ethoxylated Nonylphenol, Branched

Rat

Dog

category approach
The product is not considered to be carcinogenic.

This product does not contain any ingredient designated as probable or suspected human carcinogens by:
IARC
ACGIH

Toxicity for reproduction and development

Toxicity to reproduction / fertility

no data available

Developmental Toxicity/Teratogenicity

no data available

STOT

STOT-single exposure

Ethoxylated Nonylphenol, Branched

Routes of exposure: Ingestion, Skin contact
The substance or mixture is not classified as specific target organ toxicant, single exposure according to GHS criteria.
internal evaluation

STOT-repeated exposure

Ethoxylated Nonylphenol, Branched

Routes of exposure: Ingestion
The substance or mixture is not classified as specific target organ toxicant, repeated exposure according to GHS criteria.
internal evaluation
Oral exposure 90 Days - Rat

No irreversible effects were observed during chronic oral toxicity tests.
Unpublished internal reports

Oral exposure 730 Days - Rat
No irreversible effects were observed during chronic oral toxicity tests.
Unpublished internal reports

Oral exposure 730 Days - Dog
No irreversible effects were observed during chronic oral toxicity tests.
Unpublished internal reports

NOEL: 40 mg/kg
Unpublished internal reports

Aspiration toxicity no data available

SECTION 12: Ecological information

12.1 Toxicity

Aquatic Compartment

Acute toxicity to fish
Ethoxylated Nonylphenol, Branched — category approach
Toxic to fish.

Acute toxicity to daphnia and other aquatic invertebrates. — no data available

Toxicity to aquatic plants
Ethoxylated Nonylphenol, Branched — category approach
Toxic to algae with long lasting effects.

Toxicity to microorganisms — no data available

Chronic toxicity to fish — no data available

Chronic toxicity to daphnia and other aquatic invertebrates. — no data available

Chronic Toxicity to aquatic plants — no data available

12.2 Persistence and degradability

Abiotic degradation — no data available

Physical- and photo-chemical elimination — no data available

Biodegradation

Biodegradability	Ultimate aerobic biodegradability Not readily biodegradable. By analogy Unpublished internal reports

Degradability assessment

Ethoxylated Nonylphenol, Branched	The product is not considered to be rapidly degradable in the environment

12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water	Not applicable, Surface-Active.
Bioconcentration factor (BCF)	
Ethoxylated Nonylphenol, Branched	category approach Expert judgment Not potentially bioaccumulable

12.4 Mobility in soil

Adsorption potential (Koc)	no data available
Known distribution to environmental compartments	Ultimate destination of the product: Water Ultimate destination of the product: Sediment

12.5 Results of PBT and vPvB assessment

Ethoxylated Nonylphenol, Branched	This substance is not considered to be persistent, bioaccumulating, and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

12.6 Other adverse effects no data available

Ecotoxicity assessment

Acute aquatic toxicity	No information available. By analogy Toxic to aquatic organisms. Published data

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product Disposal

Prohibition

- Should not be released into the environment.
- Do not let product enter drains.

- Waste Management options should first consider possible re-use or recycling opportunities. Some provinces have active "Waste Exchange" networks for re-use and recycling of wastes. Contact your local waste management companies to explore available options. All waste management activities must obey local, provincial and federal regulations. Possible disposal methods include the following:

- Incinerate directly or in combination with a flammable solvent.

Advice on cleaning and disposal of packaging

- Empty the packaging completely prior to disposal.
- Completely empty the packaging prior to decontamination.
- Carefully drain and then steam clean.
- Offer rinsed packaging material to local recycling facilities.

- Dispose of in accordance with local regulations.

SECTION 14: Transport information

Transportation status: IMPORTANT! Statements below provide additional data on listed transport classification.
The listed Transportation Classification does not address regulatory variations due to changes in package size, mode of shipment or other regulatory descriptors.

TDG

14.1 UN number	UN 3082
14.2 Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Ethoxylated nonylphenol)
14.3 Transport hazard class	9
Label(s)	9
14.4 Packing group	
Packing group	III
ERG No	171
14.5 Environmental hazards	YES
Marine pollutant	Marine Pollutant

DOT

14.1 UN number	UN 3082
14.2 Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Ethoxylated nonylphenol)
14.3 Transport hazard class	9
Label(s)	9
14.4 Packing group	
Packing group	III
ERG No	171
14.5 Environmental hazards	YES

Marine pollutant

IMDG

14.1 UN number	UN 3082
14.2 Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Ethoxylated nonylphenol)
IMDG Code segregation group	Not Relevant
14.3 Transport hazard class	9
Label(s)	9
14.4 Packing group	
Packing group	III
14.5 Environmental hazards	YES
Marine pollutant	
14.6 Special precautions for user	
EmS	F-A , S-F

For personal protection see section 8.

IATA

14.1 UN number	UN 3082
14.2 Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Ethoxylated nonylphenol)
14.3 Transport hazard class	9
Label(s):	9
14.4 Packing group	
Packing group	III
Packing instruction (cargo aircraft)	964
Max net qty / pkg	450.00 L
Packing instruction (passenger aircraft)	964
Max net qty / pkg	450.00 L
14.5 Environmental hazards	YES
14.6 Special precautions for user	

For personal protection see section 8.

Note: The above regulatory prescriptions are those valid on the date of publication of this sheet. Given the possible evolution of transportation regulations for hazardous materials, it would be advisable to check their validity with your sales office.

SECTION 15: Regulatory information

15.1 Notification status

Inventory Information	Status
United States TSCA Inventory	- On TSCA Inventory
Canadian Domestic Substances List (DSL)	- All components of this product are on the Canadian DSL
Australia Inventory of Chemical Substances (AICS)	- On the inventory, or in compliance with the inventory
Japan. CSCL - Inventory of Existing and New Chemical Substances	- On the inventory, or in compliance with the inventory
Korea. Korean Existing Chemicals Inventory (KECI)	- On the inventory, or in compliance with the inventory
China. Inventory of Existing Chemical Substances in China (IECSC)	- On the inventory, or in compliance with the inventory

15.2 National Regulations

no data available

SECTION 16: Other information

Revision Date:

11/10/2016

NFPA (National Fire Protection Association) - Classification

Health	2 moderate
Flammability	1 slight
Instability or Reactivity	0 minimal

HMIS (Hazardous Materials Identification System (Paint & Coating)) - Classification

Health	2 moderate
Flammability	1 slight
Reactivity	0 minimal
PPE	Determined by User; dependent on local conditions

- ACGIH American Conference of Governmental Industrial Hygienists
- OSHA Occupational Safety and Health Administration
- NTP National Toxicology Program
- IARC International Agency for Research on Cancer
- NIOSH National Institute for Occupational Safety and Health

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information, and belief at the date of its publication. Such information is only given as a guidance to help the user handle, use, process, store, transport, dispose, and release the product in satisfactory safety conditions and is not to be considered as a warranty or quality specification. It should be used in conjunction with technical sheets but do not replace them. Thus, the information only relates to the designated specific product and may not be applicable if such product is used in combination with other materials or in any other manufacturing process, unless otherwise specifically indicated. It does not release the user from ensuring he is in conformity with all regulations linked to its activity.