

RHODASURF ON 870

Revision Date 11/10/2016

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifier**

- Trade name RHODASURF ON 870

1.2 Relevant identified uses of the substance or mixture and uses advised against**Uses of the Substance / Mixture**

- Surfactants for various applications
- Emulsifier

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)**

Combustible dust, Category 1

May form combustible dust concentrations in air.

2.2 Label elements**Hazardous Products Regulations (WHMIS 2015)****Signal Word**

- Warning

Hazard Statements

- May form combustible dust concentrations in air.

2.3 Other hazards which do not result in classification

- H401: Toxic to aquatic life.
- H412: Harmful to aquatic life with long lasting effects.

SECTION 3: Composition/information on ingredients**3.1 Substance**

II - Chemical nature Alcohols C12-20 ethoxylated

WHMIS Hazardous Ingredients and Impurities

Chemical name	Identification number CAS-No.	Concentration [% wt/wt or V/V]
Alcohols, C16-18 and C18-unsatd., ethoxylated	68920-66-1	>= 99 - <= 100

WHMIS Non Hazardous Ingredients and Impurities

Chemical name	Identification number CAS-No.	Concentration [% wt/wt or V/V]
Water	7732-18-5	0.1- 1

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
- If breathed in, move person into fresh air.
- Consult a physician if necessary.

In case of skin contact

- In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.
- Call a physician if irritation develops or persists.
- Wash contaminated clothing before reuse.

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

- Do not induce vomiting without medical advice.
- If victim is conscious:
- Rinse mouth with water.
- Keep at rest.
- Do not give anything to drink.
- 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

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

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

- Water spray
- Foam
- Carbon dioxide (CO₂)
- Multipurpose powders

Unsuitable extinguishing media

- High volume water jet
- (frothing possible)

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.
- Risk of dust explosion.
- Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

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

- Do not use a solid water stream as it may scatter and spread fire.

Further information

- Standard procedure for chemical fires.
- 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.
- Cool containers/tanks with water spray.

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

- Wear suitable protective equipment.
- For further information refer to section 8 "Exposure controls / personal protection."

6.2 Environmental precautions

- Stop the leak. Turn leaking containers leak-side up to prevent the escape of liquid.
- Contain the spilled material by diking.
- Do not flush into surface water or sanitary sewer system.
- Take all necessary measures to avoid accidental discharge of products into drains and waterways due to the rupture of containers or transfer systems.

6.3 Methods and materials for containment and cleaning up

- Stop leak if safe to do so.

Prohibition

- Avoid dust formation.
- Use only non-sparking tools.

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).
- Allow to solidify.
- Shovel or sweep up.
- Never return spills in original containers for re-use.
- Keep in properly labeled containers.
- Keep in suitable, closed containers for disposal.

Decontamination / cleaning

- Wash nonrecoverable remainder with large amounts of water.
- Clean contaminated surface thoroughly.
- 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.

Additional advice

- Material can create slippery conditions.

- Remove all incompatible materials as quickly as possible

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

- If it is handled as a liquid, there is significant hazard of 1st, 2nd and 3rd degree burns
- Potential dust explosion hazard.
- Do not use sparking tools.
- Use explosion-proof equipment.
- This powder should not be flowed through non-conductive ducts or pipes
- Mixture may charge electrostatically: always use grounding leads when transferring from one container to another.
- Use only appropriately classed electrical equipment.
- Provide sufficient air exchange and/or exhaust in work rooms.
- Ground the equipment.
- Take measures to prevent the build up of electrostatic charge.
- Ethylene oxide may collect in container head space.
- Provide adequate ventilation.
- Handle in accordance with good industrial hygiene and safety practice.
- Avoid dust formation.
- Avoid allowing the dust to build up. Clean regularly.
- Do not breathe vapors/dust.
- Avoid contact with skin and eyes.

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.
- The user is responsible for monitoring the working environment in accordance with local laws and regulations.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures/Storage conditions

- Does not require any specific or particular measures.
- Do not stack the pallets.
- Stable under normal conditions.
- Keep in a dry, cool and well-ventilated place.
- Keep container tightly closed.
- Keep away from open flames, hot surfaces and sources of ignition.
- Keep away from incompatible materials to be indicated by the manufacturer
- Keep away from: Hazardous reactions may occur on contact with certain chemicals. (Refer to the list of incompatible materials section 10: "Stability-Reactivity")., Strong oxidizing agents, Strong reducing agents.

Requirements for storage rooms and vessels

- Stable under recommended storage conditions.

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.
- In the case of dust or aerosol formation use respirator with an approved filter.

Hand protection

- Recommended preventive skin protection
- Gloves
- Handling molten product:
- Do not wear cotton gloves.
- Do not wear leather gloves.
- 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
 - Handling molten product:
 - Safety glasses with side-shields
 - Face-shield

Skin and body protection

- Recommended preventive skin protection
- Footwear protecting against chemicals
- Impervious clothing
- Handling molten product:
 - Protective suit
- Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.

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.
- The user is responsible for monitoring the working environment in accordance with local laws and regulations.

Protective measures

- Ensure that eyewash stations and safety showers are close to the workstation location.
- Emergency equipment immediately accessible, with instructions for use.
- 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.
- 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

<u>Appearance</u>	<u>Form:</u> Waxy solid <u>Physical state:</u> solid <u>Color:</u> off-white to light yellow
<u>Odor</u>	slight
<u>Odor Threshold</u>	no data available
<u>pH</u>	6.0 - 8.0 (10 % (m / m))
<u>Melting point/freezing point</u>	<u>Softening point:</u> 109 °F (43 °C)
<u>Initial boiling point and boiling range</u>	no data available
<u>Flash point</u>	459 °F (237 °C) open cup Flammability class: Will burn
<u>Evaporation rate (Butylacetate = 1)</u>	no data available
<u>Flammability (solid, gas)</u>	May form combustible dust concentrations in air.
<u>Flammability / Explosive limit</u>	no data available
<u>Autoignition temperature</u>	no data available
<u>Vapor pressure</u>	0.10 mmHg (0.133322 hPa) (77 °F (25 °C))
<u>Vapor density</u>	no data available
<u>Density</u>	1.03 - 1.04 g/cm3 (77 °F (25 °C))
<u>Relative density</u>	no data available
<u>Solubility</u>	<u>Water solubility:</u> soluble
<u>Partition coefficient: n-octanol/water</u>	no data available
<u>Decomposition temperature</u>	no data available

<u>Viscosity</u>	no data available
<u>Explosive properties</u>	no data available
<u>Oxidizing properties</u>	no data available

9.2 Other information

no data available

SECTION 10: Stability and reactivity**10.1 Reactivity**

- no data available

10.2 Chemical stability

- Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions**Polymerization**

- Hazardous polymerization does not occur.

10.4 Conditions to avoid

- Keep away from heat and sources of ignition.
- Keep away from flames and sparks.
- Static electricity
- Avoid dust formation.

10.5 Incompatible materials

- Strong oxidizing agents
- Strong reducing agents

10.6 Hazardous decomposition products

- On combustion or on thermal decomposition (pyrolysis), releases:
- (Carbon oxides (CO + CO₂)).

SECTION 11: Toxicological information**11.1 Information on toxicological effects****Acute toxicity****Acute oral toxicity**Alcohols, C16-18 and C18-unsatd.,
ethoxylatedNot classified as hazardous for acute oral toxicity according to GHS.
category approach
Not classified as harmful if swallowed**Acute inhalation toxicity**

no data available

Acute dermal toxicityAlcohols, C16-18 and C18-unsatd.,
ethoxylatedNot classified as hazardous for acute dermal toxicity according to GHS.
category approach
Not classified as harmful by contact with skin

Acute toxicity (other routes of administration)

no data available

Skin corrosion/irritation

Alcohols, C16-18 and C18-unsatd., ethoxylated

No skin irritation
category approach**Serious eye damage/eye irritation**

Alcohols, C16-18 and C18-unsatd., ethoxylated

No eye irritation
category approach**Respiratory or skin sensitization**

Alcohols, C16-18 and C18-unsatd., ethoxylated

Does not cause skin sensitization.
category approach
Published data**Mutagenicity****Genotoxicity in vitro**

Alcohols, C16-18 and C18-unsatd., ethoxylated

category approach
In vitro tests did not show mutagenic effects**Genotoxicity in vivo**

Alcohols, C16-18 and C18-unsatd., ethoxylated

category approach
In vivo tests did not show mutagenic effects**Carcinogenicity**

no data available

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**

Alcohols, C16-18 and C18-unsatd., ethoxylated

The substance or mixture is not classified as specific target organ toxicant, single exposure according to GHS criteria.
internal evaluation, category approach**STOT-repeated exposure**

no data available

Aspiration toxicity

no data available

SECTION 12: Ecological information**12.1 Toxicity****Aquatic Compartment**

Acute toxicity to fish no data available

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

Toxicity to aquatic plants no data available

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**

Alcohols, C16-18 and C18-unsatd., ethoxylated

The substance fulfills the criteria for ultimate aerobic biodegradability and ready biodegradability category approach

12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water no data available

Bioconcentration factor (BCF) no data available

12.4 Mobility in soil

Adsorption potential (Koc) no data available

Known distribution to environmental compartments no data available

12.5 Results of PBT and vPvB assessment

Alcohols, C16-18 and C18-unsatd., ethoxylated

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

Alcohols, C16-18 and C18-unsatd., ethoxylated

Toxic to aquatic life.
category approach

Chronic aquatic toxicity

Alcohols, C16-18 and C18-unsatd., ethoxylated

Harmful to aquatic life with long lasting effects.
category approach

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product Disposal

- Incinerate directly or in combination with a flammable solvent.
- 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:
- Stabilize and solidify this material with compatible binders.
- Can be landfilled, when in compliance with local regulations.

Advice on cleaning and disposal of packaging

- Rinse with an appropriate solvent.
- Dispose of in accordance with local regulations.

SECTION 14: Transport information

TDG

not regulated

DOT

not regulated

IMDG

PRCO90002121

Version : 2.01 / CA (Z8)

www.solvay.com



not regulated

IATA

not regulated

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	1 slight
Flammability	1 slight
Instability or Reactivity	0 minimal

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

Health	1 slight
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.