

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

- Trade name RHODAFAC H66

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

- Hydrotropic agent

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

- Not classified as hazardous product under the regulation above.

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

- Not labelled as hazardous product under the regulation above.

2.3 Other hazards which do not result in classification

- Slightly irritating to eyes.
- Hazardous reactions may occur on contact with certain chemicals. (Refer to the list of incompatible materials section 10: "Stability-Reactivity").

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

- Not applicable, this product is a mixture.

3.2 Mixture

- Chemical nature Aqueous solution of Poly(oxy-1,2-ethanediyl), alpha-phosphono-omega-(methylphenoxy)-, dipotassium salt

WHMIS Hazardous Ingredients and Impurities

- No ingredients are hazardous.

WHMIS Non Hazardous Ingredients and Impurities

Chemical name	Identification number CAS-No.	Concentration [% wt/wt or V/V]
Potassium Salt Of Phosphate Ester Of Cresyl Ethoxylate	66057-30-5	49- 51
Water	7732-18-5	49- 51

SECTION 4: First aid measures**4.1 Description of first-aid measures****General advice**

- First responder needs to protect himself.
- Place affected apparel in a sealed bag for subsequent decontamination.

In case of inhalation

- Move to fresh air.
- Keep at rest.
- Consult a physician if necessary.

In case of skin contact

- Take off contaminated clothing and shoes immediately.
- Wash off with plenty of water.
- Consult a physician if necessary.

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 leave the victim unattended.
- Vomiting may occur spontaneously
- Risk of product entering the lungs on vomiting after ingestion.
- Lay victim on side.
- Obtain medical attention.

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**

- Carbon dioxide (CO₂)
- Foam
- Water spray

Unsuitable extinguishing media

- High volume water jet

5.2 Special hazards arising from the substance or mixture**Specific hazards during fire fighting**

- Under fire conditions:
- Will burn
- (following evaporation of water)
- Hazardous decomposition products formed under fire conditions.

Hazardous combustion products:

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

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

- Avoid release to the environment.

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

- Avoid contact with the skin and the eyes.
- Personal protective equipment
- Wear suitable gloves.
- Safety glasses
- Wear suitable protective equipment.
- Stop the leak. Turn leaking containers leak-side up to prevent the escape of liquid.

6.2 Environmental precautions

- Prevent product from entering sewage system.
- Contain the spilled material by diking.

6.3 Methods and materials for containment and cleaning up***Recovery***

- Absorb the product onto porous material.
- Sweep up or vacuum up spillage and collect in suitable container for disposal.
- Pump up the product into a suitably labeled spare container.
- Keep in suitable, closed containers for disposal.

Decontamination / cleaning

- Wash off with plenty 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.

Prohibition

- Never return spills in original containers for re-use.

Additional advice

- Material can create slippery conditions.

6.4 Reference to other sections

- no data available

SECTION 7: Handling and storage**7.1 Precautions for safe handling**

- Does not require any specific or particular measures.
- Avoid the formation or spread of mists in the atmosphere.
- Avoid any direct contact with the product.
- Handle in accordance with good industrial hygiene and safety practice.
- Ethylene oxide may collect in container head space.
- Do not use in areas without 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.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures/Storage conditions

- Take all necessary measures to avoid accidental discharge of products into drains and waterways due to the rupture of containers or transfer systems.
- Keep in a well-ventilated place.
- Keep in a dry, cool place.
- 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: Strong acids, Strong bases, Strong oxidizing agents, Strong reducing agents.

Packaging material**Suitable material**

- Plastic materials.

Unsuitable material

- Materials other than those recommended.

Remarks

- Plastic drum

Requirements for storage rooms and vessels

Recommended storage temperature: 68 - 86 °F (20 - 30 °C)

- The product may become colored over a period of time. This does not affect its properties.

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
- Extract at emission point.

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.
- Use a respirator with an approved filter if a risk assessment indicates this is necessary.

Hand protection

- Wear suitable 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.
- Gloves must be inspected prior to use.

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
 - Tightly fitting safety goggles

Skin and body protection

- Preventive skin protection
- Impervious clothing
- Footwear protecting against chemicals
- Protective suit
- Choose body protection according to the amount and concentration of the dangerous substance at the 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.

Protective measures

- Ensure that eyewash stations and safety showers are close to the workstation location.
- 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.
- Handle in accordance with good industrial hygiene and safety practice.
- 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.
 brown

Odor

slight

Odor Threshold

no data available

pH

8.0 - 10.0 (77 °F (25 °C))

Melting point/freezing point

no data available

Initial boiling point and boiling range

Boiling point/boiling range: > 212 °F (> 100 °C)

Flash point

> 212 °F (100 °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

> 1 g/cm³ (77 °F (25 °C))

Relative density

no data available

Solubility

Water solubility:
soluble

Solubility in other solvents:
Aromatic hydrocarbons : insoluble

organic polar solvents : insoluble

Partition coefficient: n-octanol/water

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 information available.

9.2 Other information

no data available

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

- no data available

10.2 Chemical stability

- Stable at room temperature.
- Stable under normal conditions.

10.3 Possibility of hazardous reactions**polymerization**

- Hazardous polymerization does not occur.

10.4 Conditions to avoid

- Heat, flames and sparks.

10.5 Incompatible materials

- Strong bases
- Strong acids
- 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)).
- Oxides of phosphorus

SECTION 11: Toxicological information**11.1 Information on toxicological effects****Acute toxicity****Acute oral toxicity**

Not classified as harmful if swallowed
According to the data on the components
According to the classification criteria for mixtures.

Acute inhalation toxicity

Not classified as harmful by inhalation
According to the data on the components
According to the classification criteria for mixtures.

Acute dermal toxicity

Not classified as harmful by contact with skin

According to the data on the components
According to the classification criteria for mixtures.

Acute toxicity (other routes of administration)

no data available

Skin corrosion/irritation

Potassium Salt Of Phosphate Ester Of
Cresyl Ethoxylate

Rabbit
No skin irritation
Method: OECD Test Guideline 404
Diluted product
Unpublished internal reports

Serious eye damage/eye irritation

Potassium Salt Of Phosphate Ester Of
Cresyl Ethoxylate

Rabbit
No eye irritation
Method: OECD Test Guideline 405
Diluted product
Unpublished internal reports

Respiratory or skin sensitization

Not classified as sensitizing by skin contact
According to the data on the components
According to the classification criteria for mixtures.

Mutagenicity**Genotoxicity in vitro**

Product is not considered to be genotoxic
According to the data on the components
According to the classification criteria for mixtures.

Genotoxicity in vivo

Product is not considered to be genotoxic
According to the data on the components
According to the classification criteria for mixtures.

Carcinogenicity

The product is not considered to be carcinogenic.
According to the data on the components
According to the classification criteria for mixtures.

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**

The product is not considered to affect fertility.
According to the data on the components
According to the classification criteria for mixtures.

Developmental Toxicity/Teratogenicity

The product is not considered to be teratogenic.
The product is not considered to be toxic for development.
According to the data on the components
According to the classification criteria for mixtures.

STOT**STOT-single exposure**

The substance or mixture is not classified as specific target organ toxicant, single exposure according to GHS criteria.
According to the data on the components, According to the classification criteria for mixtures.

STOT-repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure according to GHS criteria.
According to the data on the components, According to the classification criteria for mixtures.

Aspiration toxicity

no data available

SECTION 12: Ecological information**12.1 Toxicity****Aquatic Compartment****Acute toxicity to fish**

Potassium Salt Of Phosphate Ester Of
Cresyl Ethoxylate

LC50 - 96 h : > 80 mg/l - Oncorhynchus mykiss (rainbow trout)
semi-static test

Method: OECD Test Guideline 203
Highest concentration tested
Not harmful to fish (LC/LL50 > 100 mg/L)
Expert judgment
Unpublished internal reports

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**

Potassium Salt Of Phosphate Ester Of Cresyl Ethoxylate

Ultimate aerobic biodegradability
Method: According to ISO 14593 method
16.1 % - 28 Days
The substance does not fulfill the criteria for ready biodegradability and ultimate aerobic biodegradability
Theoretical carbon dioxide production
Unpublished internal reports

Degradability assessment

Potassium Salt Of Phosphate Ester Of Cresyl Ethoxylate

The product is not considered to be rapidly degradable in the environment

12.3 Bioaccumulative potential**Partition coefficient: n-octanol/water**

Potassium Salt Of Phosphate Ester Of Cresyl Ethoxylate

Not potentially bioaccumulable

Bioconcentration factor (BCF)

no data available

12.4 Mobility in soil**Adsorption potential (Koc)**

no data available

Known distribution to environmental compartments

Ultimate destination of the product: Water
Test results are based on the dry product.

Ultimate destination of the product: Sediment
Test results are based on the dry product.

12.5 Results of PBT and vPvB assessment

Potassium Salt Of Phosphate Ester Of Cresyl Ethoxylate

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

Potassium Salt Of Phosphate Ester Of Cresyl Ethoxylate Not harmful to aquatic life (LC/LL50, EC/EL50 > 100 mg/L)

Chronic aquatic toxicity

Potassium Salt Of Phosphate Ester Of Cresyl Ethoxylate Not classified due to data which are conclusive although insufficient for classification.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product Disposal

Prohibition

- 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:
- Dispose of as hazardous waste in compliance with local and national regulations.
- Dewater (eg. Evaporation) the product.
- Stabilize and solidify this material with compatible binders.
- Dispose of contents/ container to an approved landfill.
- Incinerate directly or in combination with a flammable solvent.

Advice on cleaning and disposal of packaging

- Completely empty the packaging prior to decontamination.
- Carefully drain and then steam clean.
- Recycle following cleaning.
- Destroy at an authorized site.
- Dispose of in accordance with local regulations.

Measure for waste avoidance or recovery

- Do not dispose of the product at a dump.

SECTION 14: Transport information

TDG

not regulated

DOT

not regulated

NOM

not regulated

IMDG

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	- Listed on Inventory
Canadian Domestic Substances List (DSL)	- Listed on Inventory
Australia Inventory of Chemical Substances (AICS)	- Listed on Inventory
Japan. CSCL - Inventory of Existing and New Chemical Substances	- Listed on Inventory
Korea. Korean Existing Chemicals Inventory (KECI)	- Listed on Inventory
China. Inventory of Existing Chemical Substances in China (IECSC)	- Listed on Inventory
Philippines Inventory of Chemicals and Chemical Substances (PICCS)	- Listed on Inventory

15.2 National Regulations

no data available

SECTION 16: Other information**Revision Date:**

04/04/2017

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.