

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

- Trade name RHODOLINE 688

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

- Defoamer

1.3 Details of the supplier of the safety data sheet**Company**

Solvay USA Inc.,
NOVECARE
504 Carnegie Center
Princeton, NJ, 08540, US
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 OSHA 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**HCS 2012 (29 CFR 1910.1200)**

Aspiration hazard, Category 1

H304: May be fatal if swallowed and enters airways.

2.2 Label elements**HCS 2012 (29 CFR 1910.1200)****Pictogram****Signal Word**

- Danger

Hazard Statements

- H304

May be fatal if swallowed and enters airways.

Precautionary Statements**Response**

- P301 + P310
- P331

IF SWALLOWED: Immediately call a POISON CENTER/doctor.
Do NOT induce vomiting.

Storage

- P405 Store locked up.
- Disposal
- P501 Dispose of contents/ container to an approved waste disposal plant.

2.3 Other hazards which do not result in classification

- Slightly irritating to eyes.
- Does NOT present any particular fire hazard.
- Harmful or toxic vapors are released.
- 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 mixture based on
Petroleum distillates

Hazardous Ingredients and Impurities

Chemical name	Identification number CAS-No.	Concentration [%]
Distillates (petroleum), solvent-dewaxed heavy paraffinic	64742-65-0	45
Distillates (petroleum), hydrotreated heavy paraffinic	64742-54-7	45
Siloxanes and Silicones, di-Me, reaction products with silica	67762-90-7	>= 1 - < 5

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

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.
- Get medical attention if irritation develops and 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**

- 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.
- Do not induce vomiting: contains petroleum distillates and/or aromatic solvents.
- Aspiration of the swallowed or vomited product can cause severe pulmonary complications.

SECTION 5: Firefighting measures**Flash point**

> 360 °F (> 182 °C)
Pensky-Martens closed cup

Flammability class: Will burn

Autoignition temperature

no data available

Flammability / Explosive limit

Lower flammability/explosion limit : 0.90 %(V)

Upper flammability/explosion limit : 7.00 %(V)

5.1 Extinguishing media**Suitable extinguishing media**

- Extinguishing media - small fires
- Dry chemical
- Carbon dioxide (CO₂)

- Extinguishing media - large fires
- Foam
- Water mist

Unsuitable extinguishing media

- Water
- (burning material will float)

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
- Hydrocarbon residues
- Silica

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 closed containers exposed to fire with water spray.

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.

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."
- Caution
- If spilled, may cause the floor to be slippery.
- Sweep up to prevent slipping hazard.

6.2 Environmental precautions

- 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.
- Spills may be reportable to the National Response Center (800-424-8802) and to state and/or local agencies

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

- Stop leak if safe to do so.

- Dam up with sand or inert earth (do not use combustible materials).

Recovery

- Recover as much of the product as possible.
- Soak up with inert absorbent material.
- Shovel or sweep up.
- Keep in suitable, closed containers for disposal.
- Never return spills in original containers for re-use.

Decontamination / cleaning

- Wash with plenty of water and detergent.
- 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.

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**

- Handle in accordance with good industrial hygiene and safety practice.
- Avoid inhalation of vapor or mist.
- Avoid contact with skin and eyes.
- Freezing will affect the physical condition but will not damage the material. Thaw and mix before using.
- Avoid localized overheating.
- Vent drums while heating
- Homogenize before using.

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.
- 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").

Requirements for storage rooms and vessels

Recommended storage temperature: < 99 °F (< 37 °C)

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**Components with workplace occupational exposure limits**

Ingredients	Value type	Value	Basis
Distillates (petroleum), solvent-dewaxed heavy paraffinic	TWA	5 mg/m ³	Occupational Safety and Health Administration - Table Z-1 Limits for Air Contaminants
		Form of exposure : Mist	
Distillates (petroleum), solvent-dewaxed heavy paraffinic			American Conference of Governmental Industrial Hygienists
Distillates (petroleum), solvent-dewaxed heavy paraffinic	TWA	5 mg/m ³	American Conference of Governmental Industrial Hygienists
		Form of exposure : Inhalable fraction	
Distillates (petroleum), solvent-dewaxed heavy paraffinic	TWA	5 mg/m ³	National Institute for Occupational Safety and Health
		Form of exposure : Mist	
Distillates (petroleum), solvent-dewaxed heavy paraffinic	ST	10 mg/m ³	National Institute for Occupational Safety and Health
		Form of exposure : Mist	
Distillates (petroleum), hydrotreated heavy paraffinic	TWA	5 mg/m ³	Occupational Safety and Health Administration - Table Z-1 Limits for Air Contaminants

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	Form of exposure : Mist		
Distillates (petroleum), hydrotreated heavy paraffinic	TWA	5 mg/m ³	American Conference of Governmental Industrial Hygienists
	Form of exposure : Inhalable fraction		
Distillates (petroleum), hydrotreated heavy paraffinic	TWA	5 mg/m ³	National Institute for Occupational Safety and Health
	Form of exposure : Mist		
Distillates (petroleum), hydrotreated heavy paraffinic	ST	10 mg/m ³	National Institute for Occupational Safety and Health
	Form of exposure : Mist		
Siloxanes and Silicones, di-Me, reaction products with silica	TWA	4 mg/m ³	Solvay Acceptable Exposure Limit

NIOSH IDLH (Immediately Dangerous to Life or Health Concentrations)

Ingredients	CAS-No.	Concentration
Distillates (petroleum), solvent-dewaxed heavy paraffinic	64742-65-0	2500 mg/m ³
Distillates (petroleum), hydrotreated heavy paraffinic	64742-54-7	2500 mg/m ³

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.

Hand protection

- Recommended preventive skin protection
- 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

Skin and body protection

- Recommended preventive skin protection
- Footwear protecting against chemicals
- Impervious clothing
- 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.
- 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>	Form: mobile Physical state: liquid Color: tan
<u>Odor</u>	mild
<u>Odor Threshold</u>	no data available
<u>pH</u>	Not applicable
<u>Melting point/freezing point</u>	no data available
<u>Initial boiling point and boiling range</u>	Boiling point/boiling range: 284 - 900 °F (140 - 482 °C) (760 mmHg (1,013.25 hPa))
<u>Flash point</u>	> 360 °F (> 182 °C) Pensky-Martens closed cup Flammability class: Will burn

<u>Evaporation rate (Butylacetate = 1)</u>	< 1
<u>Flammability (solid, gas)</u>	no data available
<u>Flammability (liquids)</u>	no data available
<u>Flammability / Explosive limit</u>	<u>Lower flammability/explosion limit:</u> 0.90 %(V)
	<u>Upper flammability/explosion limit:</u> 7.00 %(V)
<u>Autoignition temperature</u>	no data available
<u>Vapor pressure</u>	< 0.1 mmHg (< 0.13 hPa) (68 °F (20 °C))
<u>Vapor density</u>	no data available
<u>Density</u>	
<u>Relative density</u>	0.86 (77 °F (25 °C))
<u>Solubility</u>	<u>Water solubility:</u> insoluble
<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.

10.5 Incompatible materials

- Strong oxidizing agents
- Strong acids
- Strong bases

10.6 Hazardous decomposition products

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

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Acute oral toxicity

Not classified as hazardous for acute oral toxicity according to GHS.
According to the data on the components
According to the classification criteria for mixtures.

Acute inhalation toxicity

Not classified as hazardous for acute inhalation toxicity according to GHS.
According to the data on the components
According to the classification criteria for mixtures.

Acute dermal toxicity

Not classified as hazardous for acute dermal toxicity according to GHS.
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

Not classified as irritating to skin
According to the data on the components
According to the classification criteria for mixtures.

Serious eye damage/eye irritation

Not classified as irritating to eyes
According to the data on the components
According to the classification criteria for mixtures.

Respiratory or skin sensitization

Does not cause skin sensitization.
According to the data on the components
According to the classification criteria for mixtures.

Mutagenicity

Genotoxicity in vitro

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

Genotoxicity in vivo

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

Carcinogenicity

Distillates (petroleum), solvent-
dewaxed heavy paraffinic

Dermal
Expert judgment and weight of evidence determination.
The product is not considered to be carcinogenic.

Ingredients	CAS-No.	Rating	Basis
Distillates (petroleum), solvent-dewaxed heavy paraffinic	64742-65-0	Suspected human carcinogen	ACGIH

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

NTP
IARC
OSHA

Toxicity for reproduction and development**Toxicity to reproduction / fertility**

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

Developmental Toxicity/Teratogenicity

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

Distillates (petroleum), solvent-
dewaxed heavy paraffinic

Inhalation - Rat
Information given is based on data obtained from similar substances.
Subacute toxicity
Published data
Not considered to cause serious damage to health on repeated exposure

Dermal 21 Days - Rabbit , male and female
NOAEL: 1000 mg/kg
Unpublished reports
Subacute toxicity
Not considered to cause serious damage to health on repeated exposure

Aspiration toxicity

Distillates (petroleum), solvent-dewaxed heavy paraffinic	May be fatal if swallowed and enters airways.
Distillates (petroleum), hydrotreated heavy paraffinic	May be fatal if swallowed and enters airways.

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

Acute toxicity to fish The product itself has not been tested.

Acute toxicity to daphnia and other aquatic invertebrates. The product itself has not been tested.

Toxicity to aquatic plants The product itself has not been tested.

Toxicity to microorganisms The product itself has not been tested.

Chronic toxicity to fish The product itself has not been tested.

Chronic toxicity to daphnia and other aquatic invertebrates. The product itself has not been tested.

Chronic Toxicity to aquatic plants The product itself has not been tested.

Sediment compartment

Toxicity to benthic organisms The product itself has not been tested.

Terrestrial Compartment

Toxicity to soil dwelling organisms The product itself has not been tested.

Toxicity to terrestrial plants The product itself has not been tested.

Toxicity to above ground organisms The product itself has not been tested.

12.2 Persistence and degradability

Abiotic degradation no data available

Physical- and photo-chemical elimination no data available

Biodegradation no data available

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 This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects no data available

Ecotoxicity assessment

Acute aquatic toxicity According to the data on the components
According to the classification criteria for mixtures.
This product has no known ecotoxicological effects.

Chronic aquatic toxicity According to the data on the components
According to the classification criteria for mixtures.
This product has no known ecotoxicological effects.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product Disposal

- Chemical additions, processing or otherwise altering this material may make the waste management information presented in this SDS incomplete, inaccurate or otherwise inappropriate. Please be advised that state and local requirements for waste disposal may be more restrictive or otherwise different from federal laws and regulations. Consult state and local regulations regarding the proper disposal of this material.

Waste Code

- Environmental Protection Agency
- Hazardous Waste – NO

Advice on cleaning and disposal of packaging

- Rinse with an appropriate solvent.

- Dispose of in accordance with local regulations.

SECTION 14: Transport information**DOT**

not regulated

TDG

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 Federal Regulations**US. EPA EPCRA SARA Title III****SARA HAZARD DESIGNATION SECTIONS 311/312 (40 CFR 370)**

Fire Hazard	no
Reactivity Hazard	no
Sudden Release of Pressure Hazard	no
Acute Health Hazard	yes
Chronic Health Hazard	no

Section 313 Toxic Chemicals (40 CFR 372.65)

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.

Section 302 Emergency Planning Extremely Hazardous Substance Threshold Planning Quantity (40 CFR 355)

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

Section 302 Emergency Planning Extremely Hazardous Substance Reportable Quantity (40 CFR 355)

This material does not contain any components with a SARA 302 RQ.

Section 304 Emergency Release Notification Reportable Quantity (40 CFR 355)

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

US. EPA CERCLA Hazardous Substances and Reportable Quantities (40 CFR 302.4)

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

15.3 State Regulations**US. California Safe Drinking Water & Toxic Enforcement Act (Proposition 65)**

WARNING! This product contains a chemical known in the State of California to cause cancer.

Ingredients	CAS-No.
Distillates (petroleum), solvent-dewaxed heavy paraffinic	64742-65-0
Distillates (petroleum), hydrotreated heavy paraffinic	64742-54-7

SECTION 16: Other information**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

Further information

- Product evaluated under the US GHS format.

Date Prepared: 02/02/2017

Key or legend to abbreviations and acronyms used in the safety data sheet

- ST STEL - 15-minute TWA exposure that should not be exceeded at any time during a workday
- TWA 8-hour, time-weighted average
- SAEL Solvay Acceptable Exposure Limit
- 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.