

SAFETY DATA SHEET		
MIRAPOL 550		
Revision: 1.00 US (EN)	Issuing date: 09/30/2014	

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

1.1 Product identifier

Trade name : MIRAPOL 550

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

Uses of the Substance / Mixture : Specific use(s): Surfactants used in cosmetics

1.3 Details of the supplier of the safety data sheet

Company : Solvay USA Inc.,
NOVECARE
8 Cedar Brook Drive
Cranbury, NJ, 08512-7500, 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)

Not a hazardous product according to Globally Harmonized System (GHS)

2.2 Label elements

HCS 2012 (29 CFR 1910.1200)

Not a hazardous product according to Globally Harmonized System (GHS)

2.3 Other hazards which do not result in classification

H402: Harmful to aquatic life.

H412: Harmful to aquatic life with long lasting effects.

Does NOT present any particular fire hazard.

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

No specific risk when handled in accordance with good occupational hygiene and safety practice.

SAFETY DATA SHEET		
MIRAPOL 550		
Revision: 1.00 US (EN)	Issuing date: 09/30/2014	

SECTION 3: Composition/information on ingredients

3.1 Substance

Not applicable, this product is a mixture.

3.2 Mixture

Synonyms : AQUEOUS CATIONIC COPOLYMER

Chemical nature : Aqueous polymer solution

Hazardous Ingredients and Impurities

Chemical Name	Identification number CAS-No.	Concentration [%]
2-Propen-1-aminium, N,N-dimethyl-N-2-propen-1-yl-, chloride (1:1)	7398-69-8	< 2
Acrylamide	79-06-1	< 0.001

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

Non Hazardous Ingredients and Impurities

Chemical Name	Identification number CAS-No.	Concentration [%]
Water	7732-18-5	> 89
2-Propen-1-aminium, N,N-dimethyl-N-2-propen-1-yl-, chloride (1:1), polymer with 2-propenamide	26590-05-6	< 9

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.

If inhaled : Negligible or unlikely exposure pathways
If breathed in, move person into fresh air.
Consult a physician if necessary.

Skin contact : In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.
Seek medical advice.
Wash contaminated clothing before re-use.

Eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Consult a physician if necessary.

Ingestion : Do not induce vomiting without medical advice.

SAFETY DATA SHEET		
MIRAPOL 550		
Revision: 1.00 US (EN)	Issuing date: 09/30/2014	

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

Risks : Skin contact may aggravate existing skin disease

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

Flash point : > 200 °F (> 93 °C)
 closed cup

 Flammability class: Will burn

Autoignition temperature : no data available

Flammability / Explosive limit : no data available

5.1 Extinguishing media

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

 Extinguishing media - large fires
 Foam
 Water spray

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
 (following evaporation of water)

SAFETY DATA SHEET		
MIRAPOL 550		
Revision: 1.00 US (EN)	Issuing date: 09/30/2014	

Container may rupture on heating.
 On combustion or on thermal decomposition (pyrolysis), releases:
 Nitrogen oxides (NOx)
 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 closed containers exposed to fire with water spray.
- Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- Personal precautions, protective equipment and emergency procedures : Wear suitable protective equipment.
 For further information refer to section 8 "Exposure controls / personal protection."
 Avoid contact with the skin and the eyes.
 Do not allow uncontrolled discharge of product into the environment.

6.2 Environmental precautions

- 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

SAFETY DATA SHEET		
MIRAPOL 550		
Revision: 1.00 US (EN)	Issuing date: 09/30/2014	

6.3 Methods and materials for containment and cleaning up

- | | | |
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| Methods for containment | : | Stop the leak. Turn leaking containers leak-side up to prevent the escape of liquid.
Dam up with sand or inert earth (do not use combustible materials). |
| Recovery | : | Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
Shovel or sweep up.
Keep in suitable, closed containers for disposal.
Never return spills in original containers for re-use. |
| Decontamination / cleaning | : | Wash off with plenty 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. |

6.4 Reference to other sections

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|-----------------------------|---|--|
| Reference to other sections | : | 7. HANDLING AND STORAGE
8. EXPOSURE CONTROLS/PERSONAL PROTECTION
13. DISPOSAL CONSIDERATIONS |
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SECTION 7: Handling and storage

7.1 Precautions for safe handling

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|-----------------------------------|---|---|
| Advice on safe handling and usage | : | 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.
To safely melt this material, use low pressure steam or place in a heated room
Avoid localized overheating.
Vent drums while heating |
| 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. |

SAFETY DATA SHEET		
MIRAPOL 550		
Revision: 1.00 US (EN)	Issuing date: 09/30/2014	

7.2 Conditions for safe storage, including any incompatibilities

Technical Measures for storage : Take all necessary measures to avoid accidental discharge of products into drains and waterways due to the rupture of containers or transfer systems.

Storage conditions

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

To be avoided : Keep away from open flames, hot surfaces and sources of ignition.
Keep away from incompatible materials to be indicated by the manufacturer

Incompatible products : Strong oxidizing agents
Strong reducing agents.

Packaging Measures

Packaging materials—Recommended : Plastic materials.

Storage stability

Storage temperature : 59 - 120 °F (15 - 49 °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. While developing safe handling procedures, do not overlook the need to clean equipment and piping systems for maintenance and repairs. Waste resulting from these procedures should be handled in accordance with Section 13: Disposal Considerations.

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.

NIOSH IDLH (Immediately Dangerous to Life or Health Concentrations)

Ingredients	CAS-No.	Concentration
Acrylamide	79-06-1	60 milligram per cubic meter

SAFETY DATA SHEET		
MIRAPOL 550		
Revision: 1.00 US (EN)	Issuing date: 09/30/2014	

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

Personal protective equipment

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. 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.
Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

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
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.

SAFETY DATA SHEET		
MIRAPOL 550		
Revision: 1.00 US (EN)	Issuing date: 09/30/2014	

Protective measures : 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. 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.

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	: Form : viscous Physical state: liquid Color: colorless to pale yellow.
Odor	: very faint
Odor Threshold	: no data available
pH	: 6.5 - 7.5
Freezing point	: 32 °F (0 °C)
Boiling point/boiling range	: > 212 °F (> 100 °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	: Relative density : 1.05

SAFETY DATA SHEET		
MIRAPOL 550		
Revision: 1.00 US (EN)	Issuing date: 09/30/2014	

Solubility	:	<u>Water solubility</u> : soluble
		<u>Solubility in other solvents</u> : organic polar solvents : soluble
Partition coefficient: n-octanol/water	:	no data available
Thermal decomposition	:	no data available
Viscosity	:	Viscosity, dynamic : 7,500 - 15,000 mPa.s (77 °F (25 °C))
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

no data available

10.2 Chemical stability

Chemical stability : Stable under normal conditions.

10.3 Possibility of hazardous reactions

Polymerization : Hazardous polymerization does not occur.

10.4 Conditions to avoid

Conditions to avoid : Keep away from heat and sources of ignition.
Keep away from flames and sparks.

10.5 Incompatible materials

Materials to avoid : Strong oxidizing agents
Strong reducing agents.

10.6 Hazardous decomposition products

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

SAFETY DATA SHEET		
MIRAPOL 550		
Revision: 1.00 US (EN)	Issuing date: 09/30/2014	

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Acute oral toxicity	:	LD50 : 39,800 mg/kg - Rat Published data
Acute inhalation toxicity	:	no data available
Acute dermal toxicity	:	LD50 : > 21,500 mg/kg - Rabbit Published data
Acute toxicity (other routes of administration)	:	no data available

Skin corrosion/irritation

Skin irritation	:	92 Days - Rabbit No skin irritation Repeated dermal application test. Published data
		Humans No skin irritation Repeated Insult Patch Test Published data
		Repeated or prolonged contact may cause slight irritation to the skin. Published data

Serious eye damage/eye irritation

Eye irritation	:	Rabbit No eye irritation Published data
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Respiratory or skin sensitization

Sensitization	:	Repeated Insult Patch Test - Humans no cutaneous sensitization reaction observed Published data
		Humans The product is not considered to be photosensitizing to guinea pigs Published data

Mutagenicity

Genotoxicity in vitro	:	Mutagenicity (Salmonella typhimurium - reverse mutation assay) with and without metabolic activation negative Published data
Genotoxicity in vivo	:	no data available

SAFETY DATA SHEET		
MIRAPOL 550		
Revision: 1.00 US (EN)	Issuing date: 09/30/2014	

Carcinogenicity

Carcinogenicity : no data available

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

NTP
IARC
OSHA
ACGIH

Toxicity for reproduction and development

Toxicity to reproduction / fertility : no data available

Developmental Toxicity/Teratogenicity : no data available

STOT

STOT-single exposure : no data available

STOT-repeated exposure : Not considered to cause serious damage to health on repeated exposure
Published data

Aspiration toxicity

Aspiration toxicity : no data available

SECTION 12: Ecological information

12.1 Toxicity

Ecotoxicity assessment

Acute aquatic toxicity : Harmful to aquatic organisms.
Unpublished internal reports

12.2 Persistence and degradability

Biodegradability

Biodegradability : Ultimate aerobic biodegradability
Not biodegradable.
internal evaluation

12.3 Bioaccumulative potential

Bioconcentration factor (BCF) : Not bioaccumulable.
internal evaluation

12.4 Mobility in soil

Adsorption potential (Koc) : Product adsorbs onto suspended material and dissolved organic material.
internal evaluation

SAFETY DATA SHEET		
MIRAPOL 550		
Revision: 1.00 US (EN)	Issuing date: 09/30/2014	

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

no data available

12.6 Other adverse effects

Environment assessment : Harmful to aquatic life.
Harmful to aquatic life with long lasting effects.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product Disposal

Advice on Disposal : Chemical additions, processing or otherwise altering this material may make the waste management information presented in this MSDS 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 : EPA:
Hazardous Waste – NO

Advice on cleaning and disposal of packaging

Measures for waste avoidance. : Do not dispose of the product at a dump.

Advice : Completely empty the packaging prior to decontamination.
Carefully drain and then steam clean.

Reason for waste disposal : Recycle following cleaning.
Dispose of contents/ container to an approved waste disposal plant.

Other data : Dispose of in accordance with local regulations.

SECTION 14: Transport information

DOT
not regulated

TDG
not regulated

IMDG
not regulated

IATA
not regulated

SAFETY DATA SHEET		
MIRAPOL 550		
Revision: 1.00 US (EN)	Issuing date: 09/30/2014	

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

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

15.2 Federal Regulations

SARA 311/312 Hazards

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

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

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

SAFETY DATA SHEET		
MIRAPOL 550		
Revision: 1.00 US (EN)	Issuing date: 09/30/2014	

EPCRA - Emergency Planning and Community Right-to-Know

CERCLA Reportable Quantity

Ingredients	CAS-No.	Reportable quantity
Acrylamide	79-06-1	5000 lb
Sodium hydroxide (Na(OH))	1310-73-2	1000 lb

SARA 304 Reportable Quantity

Ingredients	CAS-No.	Reportable quantity
Acrylamide	79-06-1	5000 lb

SARA 302 Reportable Quantity

Ingredients	CAS-No.	Reportable quantity
Acrylamide	79-06-1	5000 lb

15.3 State Regulations

California Prop 65

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

WARNING: This product contains a chemical known in the State of California to cause birth defects or other reproductive harm.
Acrylamide

No Significant Risk Levels (NSRLs) have been established for the following:
Acrylamide
Value : 0.2 micrograms per day

Formaldehyde
Value : 40 micrograms per day

SECTION 16: Other information

NFPA-Classification

Health : 0 minimal
Flammability : 1 slight
Instability or Reactivity : 0 minimal

HMIS-Classification

Health : 0 minimal
Flammability : 1 slight
Reactivity : 0 minimal

Further information

Date Prepared : 09/30/2014
Further information : Product classified under the US GHS format.

SAFETY DATA SHEET		
MIRAPOL 550		
Revision: 1.00 US (EN)	Issuing date: 09/30/2014	

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

ACGIH	:	American Conference of Governmental Industrial Hygienists
OSHA	:	Occupational Safety and Health Administration
WHMIS	:	Workplace Hazardous Materials Information System
NTP	:	National Toxicology Program
IARC	:	International Agency for Research on Cancer
SAEL	:	Solvay Acceptable Exposure Limit
NIOSH	:	National Institute for Occupational Safety and Health
NFPA	:	National Fire Protection Association
HMIS	:	Hazardous Materials Identification System (Paint & Coating)

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 another 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.