General Surfactants

SAFETY DATA SHEET

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name: **Surfamide 8**

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

Uses of the Substance/Mixture: Surfactant for various applications. For further information refer to the product technical datasheet. Uses other than those identified are not recommended

1.3 Details of the supplier of the safety data sheet

Company: General Surfactants, Inc.
30 Industry Avenue
Joliet, IL 60435

Prepared by: SDS Coordinator

Date prepared: 7/18/2016 Supersedes: 6/6/2015 Reason: Review and update

1.4 Emergency telephone

Emergency telephone number: 815-727-4791

2. Hazards identification

2.1 Emergency overview

Appearance: Clear light amber slightly viscous liquid

Precautionary statements: Causes skin irritation. Causes serious eye irritation. May cause damage to organs through prolonged or repeated exposure if swallowed. Toxic to aquatic life.

GHS classification

Physical

Not classified

Health

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Carcinogenicity	Category 2
Specific target organ toxicity, repeated exposure (oral)	Category 2 (blood, kidney, liver)

Environmental

Hazardous to the aquatic environment, acute	Category 2

2.2 GHS label elements, including precautionary statements

Hazard pictograms/symbols

Signal Word: DANGER!

Hazard Statements:
H315: Causes skin irritation
H319: Causes serious eye irritation
H351: Suspected of causing cancer
H360: May damage fertility or the unborn child
H373: May cause damage to organs (blood, kidney, liver) through prolonged or repeated exposure if swallowed
H401: Toxic to aquatic life

Precautionary Statements:
Prevention
P260: Do not breathe spray
P264: Wash affected areas thoroughly after handling
P280: Wear protective gloves and eye, face and foot protection
Response
P301+312+330: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth.
P303+P352+P332+P313: IF ON SKIN: Wash with plenty of soap and water. If skin irritation persists get medical advice/attention.
P305+P351+P338+P310: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do - continue rinsing. Immediately call a POISON CENTER or doctor/physician
P363: Wash contaminated clothing before reuse
Storage
P233: Keep container tightly closed
P234: Keep only in original container
P501: Dispose of contents and container to an approved waste disposal plant

2.3 Other hazards
No information available

3. Composition/information on ingredients

3.1 Information on components and impurities

Chemical name	CAS number(s)	GHS Classification	Concentration, %
Cocamide DEA	68603-42-9	H315: Causes skin irritation; H319: Causes serious eye irritation; H373: May cause damage to organs (blood, kidney, liver) through prolonged or repeated exposure if swallowed; H401: Toxic to aquatic life	>=60-<=70
Diethanolamine	111-42-4	H302: Harmful if swallowed; H315: Causes skin irritation; H318: Causes serious eye damage; H351: Suspected of causing cancer; H360: May damage fertility or the unborn child; H373: May cause damage to organs (blood, kidney, liver) through prolonged or repeated exposure if swallowed	>=23-<=26
Glycerin	56-81-5	Not classified	>=5-<=10

4. First aid measures

4.1 Description of first-aid measures

General advice: Show this material safety data sheet to medical personnel. Do not leave affected person unattended. Isolate exposed apparel for laundry before re-use.

Eye contact: Rinse eyes with water. Remove any contact lenses, and continue flushing eyes with running water for at least 15 minutes. Hold eyelids apart to ensure rinsing of the entire surface of the eyes and lids with water. Seek medical attention if irritation develops or persists.

Skin contact: Take off contaminated clothing and shoes immediately. Wash affected areas with plenty of water. Seek medical attention if irritation develops or persists.

Ingestion: Rinse mouth with water. Seek medical attention if you feel unwell.

If inhaled: Remove from area to fresh air. Exposure to vapor is minimal due to low volatility. Seek medical attention if respiratory irritation develops or if breathing becomes difficult.

4.2 Most important symptoms and effects, both acute and delayed

Risks: The most important known symptoms and effects are described in the labeling (section 2.2) and/or in section 11. Symptoms may include stinging, tearing, redness, swelling and blurred vision. Prolonged or repeated skin contact may aggravate existing skin conditions. Inhalation of mists may aggravate existing chronic respiratory conditions such as asthma, emphysema or bronchitis. Prolonged exposure may cause chronic effects.

4.3 Indication of any immediate medical attention and special treatment needed

Note 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.

5. Firefighting measures

Flash Point and Method: None

5.1 Extinguishing media

Suitable extinguishing media: The product is not flammable. Use media suitable for the material that is burning

Unsuitable extinguishing media: No information available

5.2 Special hazards arising from the substance or mixture

Special hazards during fire fighting: Container may rupture on heating

On combustion or on thermal decomposition: No information available

5.3 Advice for firefighters

Special protective equipment for firefighters: As in any fire, wear NIOSH/MSHA approved, pressure-demand self-contained breathing apparatus and full protective gear.

Specific firefighting methods: No special methods required. Move containers from area if it can be done without risk. Cool fire-exposed containers with water from side. Contain the extinguishing fluids by diking

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Spill area may be slippery. Wear appropriate protective equipment (See Section 8).

6.2 Environmental precautions

Do not flush into surface water or sanitary sewer system

6.3 Methods and material for containment and cleaning up

Recovery: Stop leak if safe to do so. Absorb spills with vermiculite, fuller's earth, or sand. Shovel up and place in a non-metal waste container for disposal. Dike large spills with soil or sandbags to contain it and prevent its spread. Keep in suitable, properly labeled, closed containers for disposal.

Decontamination/ cleaning: Wash non-recoverable remainder with large amounts of water. Clean contaminated surfaces thoroughly. Recover the cleaning water for subsequent disposal.

Disposal: Dispose of in accordance with local regulations.
Additional advice: Spill area may be slippery.

6.4 Reference to other sections
No information available

7. Handling and storage

7.1 Precautions for safe handling

Technical measures: Does not require any specific or particular measures

Advice on safe handling and usage: Wear appropriate protective equipment including chemical resistant gloves, chemical splash goggles and protective footwear. Handle in accordance with good industrial hygiene and safety practice. Wash affected areas after use. Do not taste or swallow. Avoid breathing mists. Product residue may remain on/in empty containers. All precautions for handling the product must be used in handling the empty container and residue. FOR COMMERCIAL AND INDUSTRIAL USE ONLY.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures for storage: Does not require any specific or particular measures

Storage conditions

Recommended: Keep container tightly closed. Opened containers must be carefully resealed and kept upright to prevent leakage.

Incompatible products: Hazardous reactions may occur on contact with certain chemicals. Refer to the list of incompatible materials section 10: “Incompatible materials”

7.3 Specific end use(s)
No information available

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 he 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
Components with workplace control parameters

Components	Value	Control parameters	Basis
Diethanolamine, CAS#111-42-2	TWA	2 mg/m3; skin	ACGIH Threshold Limit Values (TLV)

8.2 Exposure controls

Control measures

Engineering measures: Good general ventilation should be sufficient to control airborne levels. Respiratory protection is not required if good ventilation is maintained.

Personal protective equipment

Respiratory protection: In operations where mists are generated, wear a NIOSH/MSHA approved respirator that has been selected by a technically qualified person for the specific work conditions.

Hand protection: Wear long chemical resistant gloves. Observe instructions regarding permeability and breakthrough time 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 contact time. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

Eye protection: Wear chemical splash goggles.

Skin and body protection: Wear footwear protecting against chemicals, and impervious clothing. Choose body protection according to the amount and concentration of the substances in the workplace.

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 material:
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, and that emergency equipment is immediately accessible with instructions for use.
The protective equipment must be selected in accordance with current local standards and in following proper use instructions from 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.

9. Physical and chemical properties

Physical and chemical properties listed represent typical properties and should not be considered product specifications. Refer to product Certificate of Analysis for Product Specifications or contact General Surfactants for additional information.

9.1 Information on basic physical and chemical properties

Appearance:	Clear light amber solution
Odor:	Mild
Odor Threshold:	No information available
pH:	8-10 (1% aqueous solution)
Freezing point:	No information available
Melting point/range:	No information available
Boiling point/boiling range:	>100°C
Flash point:	Does not flash
Evaporation rate:	No information available
Flammability (solid, gas):	Not applicable
Flammability/Explosive limit:	No information available
Auto-ignition temperature:	No information available
Vapor pressure:	No information available
Vapor density:	No information available
Density:	0.99 g/ml, 8.3 lbs/gal (25°C)
Solubility:	Water solubility: soluble
Solubility in other solvents:	No information available
Partition coefficient: n-octanol/water:	No information available
Thermal decomposition:	No information available
Viscosity:	Slightly viscous
Explosive properties:	No information available
Oxidizing properties:	No information available

9.2 Other information

No information available

10. Stability and reactivity

10.1 Reactivity

No information available

10.2 Chemical stability

Stable and non-reactive under normal conditions of use, storage and transport

10.3 Possibility of hazardous reactions

No information available

10.4 Conditions to avoid

No information available

10.5 Incompatible materials

Strong acids, peroxides

10.6 Hazardous decomposition products

No hazardous decomposition products are known

11. Toxicological information

Product Summary:
Causes skin irritation. Causes serious eye irritation. May cause damage to organs through prolonged or repeated exposure if swallowed. Toxic to aquatic life.
No data available for the teratogenicity, mutagenicity, or reproductive toxicity of this product.

11.1 Information on toxicological effects

Acute toxicity

Acute oral:	Low toxicity if swallowed. Small amounts swallowed incidentally as a result of normal handling operations are not likely to cause injury; however, swallowing larger amounts may cause injury. Swallowing may result in gastrointestinal irritation or ulceration LD50 *Rat* 1,600mg/kg (diethanolamine)
Acute dermal:	Prolonged skin contact is unlikely to result in absorption of harmful amounts. LD50 *Rabbit* > 8,200 mg/kg (diethanolamine)
Acute inhalation:	At room temperature, exposure to vapor is minimal due to low volatility. Vapor from heated material may cause respiratory irritation and other effects. For narcotic effects: No relevant data found. LC0, *Ra*t, 4 Hour, dust/mist, 3.35 mg/l No deaths occurred at this concentration (diethanolamine)
Acute toxicity (other routes of administration):	No information available

Skin corrosion/irritation

Skin irritation:	Causes skin irritation

Serious eye damage/eye irritation

Eye irritation:	Causes serious eye irritation

Respiratory or skin sensitization

Sensitization:	Not classified as sensitizing by skin contact

Mutagenicity

Genotoxicity in vitro:	No information available
Genotoxicity in vivo:	No information available

Carcinogenicity

Carcinogenicity:	Findings from a chronic diethanolamine skin painting study by NTP include liver and kidney tumors in mice; no tumors were observed in rats. Mechanistic studies indicate that tumor formation is of questionable relevance to humans. A number of factors may have influenced the results and are being considered in their interpretation. IARC Group 2B: Possibly carcinogenic to humans (diethanolamine) ACGIH A3: Confirmed animal carcinogen with unknown relevance to humans (diethanolamine)

Toxicity for reproduction and development

Toxicity to reproduction/fertility:	May damage fertility or unborn child
Developmental toxicity/teratogenicity:	May damage fertility or unborn child

Specific Target Organ Toxicity (STOT)

STOT-single exposure:	No information available
STOT-repeated exposure:	No information available

Aspiration toxicity

Aspiration toxicity:	Based on physical properties, not likely to be an aspiration hazard

Other Hazards

Organ	Description
Eyes	Causes serious eye irritation. Symptoms may include pain, burning sensation, redness, watering, blurred vision.
Skin	Prolonged contact may cause skin irritation with local redness. May cause more severe response if skin is scratched or cut.
Ingestion	Symptoms may include vomiting, nausea, and/or feeling of general unwellness. May cause damage to organs (blood, kidney, liver) through prolonged or repeated exposure if swallowed.
Inhalation	Exposure to vapor is minimal due to low volatility. Symptoms may include coughing and difficulty breathing.
Sensitization	No known effects.

12. Ecological information

12.1 Toxicity

Aquatic toxicity:	Toxic to aquatic life.

12.2 Persistence and degradability

Biodegradation:	No information available

12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water:	No bioaccumulation is to be expected (log Pow<=4)
Bioconcentration factor (BCF):	No information available

12.4 Mobility in soil

Known distribution to environmental compartments:	No information available

12.5 Results of PBT and vPvB assessment

No information available

12.6 Other adverse effects

Environmental assessment:	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this product.

13. Disposal considerations

13.1 Waste treatment methods

RCRA Waste Code:	The waste code should be assigned in discussion between the user, the producer and the waste disposal company
Product disposal:	Observe all applicable federal, state, and local regulations
Packaging:	Remove all residue when emptying

14. Transportation information

DOT Hazard Classification:	UN number: 3082 UN proper shipping name: Environmentally Hazardous Substance, Liquid, N.O.S. (Contains Diethanolamine) Transport hazard class(es): 9 Packing group (if applicable): III

15. Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Notification status:

Country	Regulatory list	Notification
USA	TSCA	Listed or in compliance with the requirements the inventory; FIFRA Inert Ingredient
Canada	DSL	Listed or in compliance with the requirements the inventory
Mexico	INSQ	Listed or in compliance with the requirements the inventory
EU	EINECS	Listed or in compliance with the requirements the inventory; 271-657-0
Australia	AICS	Listed or in compliance with the requirements the inventory
China	IECSC	Listed or in compliance with the requirements the inventory
Japan	ENCS	Listed or in compliance with the requirements the inventory; 8-311
Korea	ECL	Listed or in compliance with the requirements the inventory; KE-03192, KE-06169
New Zealand	NZIoC	Listed or in compliance with the requirements the inventory
Philippines	PICCS	Listed or in compliance with the requirements the inventory

OSHA Hazard Communication Standard (26 CFR 1910.1200): Hazardous

CERCLA (RQ)

Ingredient(s)	CAS#	Weight	CERCLA RQ	Section 302 TPQ
Diethanolamine	111-42-2	>=23-<=25	100 lbs	

SARA/EPCRA Extremely Hazardous Substances (302/304)

Ingredient(s)	CAS#	Weight	RQ	TPQ
Diethanolamine	111-42-2	>=23-<=25		

SARA Hazard Categories (311/312)

Fire	Reactive	Acute health hazard	Chronic health hazard
No	No	Yes	No

SARA Toxic Substances (313) The following components are subject to SARA Section 313 reporting requirements

Ingredient(s)	CAS#	Weight
Not listed		

CAA (311) Volatile Organic compounds

Ingredient(s)	CAS#	Weight
Diethanolamine	111-42-2	>=23-<=25

State regulations

California Prop 65 Components. Carcinogens & Reproductive Toxicity (CRT)
Coconut oil diethanolamides CAS#68603-42-9; Diethanolamine CAS#111-42-2
Massachusetts Right To Know Components
Diethanolamine CAS#111-42-2
Minnesota Employee Right To Know
Coconut oil diethanolamides CAS#68603-42-9; Diethanolamine CAS#111-42-2
New Jersey Right To Know Components
Diethanolamine; Ethanol, 2,2'-iminobis- CAS#111-42-2
New York Right To Know Components
Diethanolamine CAS#111-42-2
Pennsylvania Right To Know Components
Ethanol, 2,2'-iminobis- CAS#111-42-2
Rhode Island Right To Know Components
Diethanolamine CAS#111-42-2

15.2 Other regulations

No information available

16. Other information

NFPA-Classification		HMIS-Classification	
Health	2 moderate	Health	2 moderate
Flammability	1 slight	Flammability	1 slight
Instability or Reactivity	0 insignificant	Reactivity	0 insignificant
		HMIS PPE	B
		B=Safety glasses, Gloves	

Key or legend to abbreviations and acronyms used in the safety data sheet			
ACGIH:	American Conference of Governmental Industrial Hygienists	NIOSH:	National Institute for Occupational Safety and Health
HMIS:	Hazardous Materials Identification System	NTP:	National Toxicology Program
IARC:	International Agency for Research on Cancer	OSHA:	Occupational Safety and Health Administration
NFPA:	National Fire Protection Association		

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