

SAFETY DATA SHEET

1. Identification

Product identifier: SURFYNOL® DF-75

Other means of identification

Recommended use: Industrial use

Recommended restrictions: None known.

Manufacturer/Importer/Distributor Information

Company Name : Evonik Corporation
Nutrition & Care
PO Box 34628
Richmond, VA 23234
USA

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Emergency telephone number:

24-Hour Health : +1 800 424 9300 (CHEMTREC - US & CANADA)

Emergency : 800 681 9531 (CHEMTREC MEXICO)
+1 703 527 3887 (CHEMTREC WORLD)

2. Hazard(s) identification

Classification according to GHS

Health Hazards

Acute toxicity (Oral) Category 5

Acute toxicity (Dermal) Category 5

Skin Corrosion/Irritation Category 3

Serious Eye Damage/Eye Irritation Category 2A

Environmental Hazards

Acute hazards to the aquatic environment Category 3

Chronic hazards to the aquatic environment Category 3

Label Elements

Hazard Symbol:

Signal Word: Warning

Hazard Statement: May be harmful if swallowed or in contact with skin.
 Causes mild skin irritation.
 Causes serious eye irritation.
 Harmful to aquatic life with long lasting effects.

Precautionary Statements
Prevention: Wash face, hands and any exposed skin thoroughly after handling. Avoid release to the environment. Wear eye protection/face protection.

Response: Call a POISON CENTER or doctor/ physician if you feel unwell. If skin irritation occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Disposal: Dispose of contents/ container to an approved facility in accordance with local, regional, national and international regulations.

Other hazards: No data available.

3. Composition/information on ingredients
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Mixtures

Chemical Identity	Common name and synonyms	CAS number	Content in percent (%)*
Fatty acids, tall-oil, diesters with polypropylene glycol	No data available.	68648-12-4	>60%
Amines, soya alkyl, ethoxylated	No data available.	61791-24-0	<10%
sodium hydroxide	No data available.	1310-73-2	<10%

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

The exact concentration has been withheld as a trade secret.

4. First-aid measures

Description of first aid measures

Inhalation:	No data available.
Skin Contact:	Wash off immediately with plenty of water for at least 15 minutes. Wash with soap and water. Immediately remove contaminated clothing, and any extraneous chemical, if possible to do so without delay.
Eye contact:	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses.
Ingestion:	Never give anything by mouth to an unconscious person.
Personal Protection for First-aid Responders:	No data available.

Most important symptoms and effects, both acute and delayed

Symptoms:	Up to now no symptoms are known.
Hazards:	No data available.

Indication of immediate medical attention and special treatment needed

Treatment:	Treat symptomatically.
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5. Fire-fighting measures

General Fire Hazards:	Do not allow run-off from fire fighting to enter drains or water courses.
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Suitable (and unsuitable) extinguishing media

Suitable extinguishing media:	Alcohol resistant foam. Water spray.
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Unsuitable extinguishing media:	No data available.
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Special hazards arising from the substance or mixture:	Incomplete combustion may form carbon monoxide. May generate ammonia gas. May generate toxic nitrogen oxide gases. Burning produces noxious and toxic fumes. Downwind personnel must be evacuated.
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Special protective equipment and precautions for firefighters

Special fire fighting procedures:	No data available.
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Special protective equipment for fire-fighters:	No data available.
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6. Accidental release measures

Personal precautions, protective equipment and emergency procedures:	Wear suitable protective clothing, gloves and eye/face protection. Use self-contained breathing apparatus and chemically protective clothing.
Accidental release measures:	No data available.
Methods and material for containment and cleaning up:	Call Emergency Response number for advice. Approach suspected leak areas with caution.
Environmental Precautions:	Use appropriate containment to avoid environmental contamination. Do not allow spill to enter into sewers or waterways.

7. Handling and storage

Handling

Technical measures:	No data available.
Local/Total ventilation:	No data available.
Safe handling advice:	Wash hands at the end of each workshift and before eating, smoking or using the toilet. Emergency showers and eye wash stations should be readily accessible. Adhere to work practice rules established by government regulations. Avoid contact with eyes. Wash hands at the end of each workshift and before eating, smoking or using the toilet.
Contact avoidance measures:	No data available.

Storage

Safe storage conditions:	Do not store near acids. Keep containers tightly closed in a dry, cool and well-ventilated place.
Safe packaging materials:	No data available.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Observe national threshold limit values.

Biological Limit Values

Observe national threshold limit values.

Appropriate Engineering Controls

No data available.

Individual protection measures, such as personal protective equipment

General information:	No data available.
Eye/face protection:	Chemical resistant goggles must be worn.
Hand Protection:	Additional Information: The protective gloves to be worn must satisfy the specifications of Regulation (EU) 2016/425 and the resulting Standard EN374., The suitability for a specific workplace should be discussed with the producers of the protective gloves.
Other:	Long sleeve shirts and trousers without cuffs.
Respiratory Protection:	No personal respiratory protective equipment normally required.
Hygiene measures:	Wash hands before breaks and immediately after handling the product. When using do not eat, drink or smoke. Remove soiled or soaked clothing immediately.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance

Physical state:	liquid
Form:	liquid
Color:	slightly turbid
Odor:	Odorless
Odor Threshold:	No data available.
Freezing point:	No data available.
Boiling Point:	93,33 °C/199,99 °F
Flammability:	No data available.

Upper/lower limit on flammability or explosive limits

Explosive limit - upper:	No data available.
Explosive limit - lower:	No data available.
Flash Point:	> 266 °C/> 511 °F
Auto-ignition temperature:	No data available.
Decomposition Temperature:	No data available.

pH:	5 - 7 100 g/l 10 % in Water
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Viscosity

Dynamic viscosity:	No data available.
Kinematic viscosity:	No data available.

Flow Time:	No data available.
Solubility(ies)	
Solubility in Water:	No data available.
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	No data available.
Vapor pressure:	< 1,3 hPa 21 °C/70 °F
Relative density:	No data available.
Density:	0,98 g/cm ³ 21 °C/70 °F
Bulk density:	No data available.
Relative vapor density:	No data available.
Other information	
Metal Corrosion:	No data available.

10. Stability and reactivity

Reactivity:	No data available.
Chemical Stability:	No data available.
Possibility of hazardous reactions:	No data available.
Conditions to avoid:	No data available.
Incompatible Materials:	Reactive metals (e.g. sodium, calcium, zinc etc.). Materials reactive with hydroxyl compounds. Organic acids (i.e. acetic acid, citric acid etc.). Mineral Acid Sodium hypochlorite. Reaction with peroxides may result in violent decomposition of peroxide possibly creating an explosion. Oxidizing agents.
Hazardous Decomposition Products:	Carbon Monoxide. Carbon Dioxide. Nitrogen Oxides Nitrogen oxide can react with water vapors to form corrosive nitric acid. Ammonia Aldehydes. Flammable hydrocarbon fragments. Silicon Dioxide. formaldehyde-like

11. Toxicological information

Information on likely routes of exposure

Inhalation:	If handled correctly, not a relevant route of exposure. Information on effects are given below.
Skin Contact:	Relevant route of exposure. Information on effects are given below.
Eye contact:	Relevant route of exposure. Information on effects are given below.

Ingestion: If handled correctly, not a relevant route of exposure. Information on effects are given below.

Acute toxicity (list all possible routes of exposure)

Oral

Product: LD 50, Rat, > 2.000 mg/kg, No deaths observed.
Components:
 Fatty acids, tall-oil, diesters with polypropylene glycol: Not toxic after single exposure, No data available.
 Amines, soya alkyl, ethoxylated: LD 50, Acute toxicity estimate, 500 mg/kg
 sodium hydroxide: Not toxic after single exposure, No data due to skin-corrosive action

Dermal

Product: LD 50, Rabbit, > 2.000 mg/kg, No deaths observed.
Components:
 Fatty acids, tall-oil, diesters with polypropylene glycol: Not toxic after single exposure, No data available.
 Amines, soya alkyl, ethoxylated: Not toxic after single exposure, No data available.
 sodium hydroxide: Not toxic after single exposure, No data due to skin-corrosive action

Inhalation

Product: Not classified for acute toxicity based on available data.
Components:
 Fatty acids, tall-oil, diesters with polypropylene glycol: Not toxic after single exposure, Vapour, No data available.
 Amines, soya alkyl, ethoxylated: Not toxic after single exposure, Dust and mist, No data available.
 sodium hydroxide: Not toxic after single exposure, Vapour, No data available.
 Not toxic after single exposure, Dust and mist, No data available.
 Not toxic after single exposure, No data due to skin-corrosive action, Dust and mist
 Not toxic after single exposure, Not applicable, Vapour

Repeated dose toxicity

Product: No data available.
Components:
 Fatty acids, tall-oil, diesters with polypropylene glycol: No data available.
 Amines, soya alkyl, ethoxylated: No data available.
 sodium hydroxide: No data available.

Skin Corrosion/Irritation

Product: Mildly Irritating
Components:
 Fatty acids, tall-oil, diesters with polypropylene glycol: No data available.
 Amines, soya alkyl, ethoxylated: Irritating.

sodium hydroxide Corrosive., EU-CLP as per Regulation (EU) No. 1272/2008, Annex VI

Serious Eye Damage/Eye Irritation

Product: Causes serious eye irritation., Rabbit, Serious eye irritation
Irritation data based on estimates.

Components:

Fatty acids, tall-oil, diesters with polypropylene glycol	No data available.
Amines, soya alkyl, ethoxylated	Risk of serious damage to eyes.
sodium hydroxide	Risk of serious damage to eyes., OECD 405, Rabbit

Respiratory or Skin Sensitization

Product: No data available.

Components:

Fatty acids, tall-oil, diesters with polypropylene glycol	No data available.
Amines, soya alkyl, ethoxylated	No data available.
sodium hydroxide	Sensitization test, man, Not a skin sensitizer.

Carcinogenicity

Product: No data available.

Components:

Fatty acids, tall-oil, diesters with polypropylene glycol	No data available.
Amines, soya alkyl, ethoxylated	No data available.
sodium hydroxide	No data available.

Germ Cell Mutagenicity

No data is available on the product itself.

In vitro

Product: No data available.

Components:

Fatty acids, tall-oil, diesters with polypropylene glycol	No data available.
Amines, soya alkyl, ethoxylated	No data available.
sodium hydroxide	Ames test, OECD 471: , negative gene mutation test, analogous OECD method: , positive

In vivo

Product: No data available.

Components:

Fatty acids, tall-oil, diesters with polypropylene glycol	No data available.
Amines, soya alkyl, ethoxylated	No data available.

sodium hydroxide	Micronucleus test, analogous OECD method, Intraperitoneal, Mouse, Female, Male, negative
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Reproductive toxicity

Product: No data is available on the product itself.

Components:

Fatty acids, tall-oil, diesters with	No data available.
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polypropylene glycol Amines, soya alkyl, ethoxylated	No data available.
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sodium hydroxide	No data available.
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Specific Target Organ Toxicity - Single Exposure

Product: No data available.

Components:

Fatty acids, tall-oil, diesters with	No data available.
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polypropylene glycol Amines, soya alkyl, ethoxylated	No data available.
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sodium hydroxide	No data available.
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Specific Target Organ Toxicity - Repeated Exposure

Product: No data available.

Components:

Fatty acids, tall-oil, diesters with	No data available.
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polypropylene glycol Amines, soya alkyl, ethoxylated	No data available.
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sodium hydroxide	No data available.
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Aspiration Hazard

Product: Not classified

Components:

Fatty acids, tall-oil, diesters with	Not classified
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polypropylene glycol Amines, soya alkyl, ethoxylated	Not classified
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sodium hydroxide	Not applicable
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Information on health hazards

Other hazards

Product: The properties of this product which are hazardous to health have been calculated as per regulation (EC) No. 1272/2008. See section 2 "Hazards Identification".;

12. Ecological information
Ecotoxicity:
Acute hazards to the aquatic environment:
Fish

Product: No data available.

Components:

Fatty acids, tall-oil, No data available.

diesters with polypropylene glycol

Amines, soya alkyl, No data available.

ethoxylated

sodium hydroxide No data available.

Aquatic Invertebrates

Product: No data available.

Components:

Fatty acids, tall-oil, No data available.

diesters with polypropylene glycol

Amines, soya alkyl, No data available.

ethoxylated

sodium hydroxide EC 50, Ceriodaphnia, 48 h, 40,4 mg/l, Literature

Toxicity to Aquatic Plants

Product: No data available.

Components:

Fatty acids, tall-oil, No data available.

diesters with polypropylene glycol

Amines, soya alkyl, No data available.

ethoxylated

sodium hydroxide No data available.

Toxicity to microorganisms

Product: No data available.

Components:

Fatty acids, tall-oil, No data available.

diesters with polypropylene glycol

Amines, soya alkyl, No data available.

ethoxylated

sodium hydroxide No data available.

Chronic hazards to the aquatic environment:
Fish

Product: No data available.

Components:

Fatty acids, tall-oil, No data available.

diesters with

polypropylene glycol	
Amines, soya alkyl, ethoxylated	No data available.
sodium hydroxide	No data available.

Aquatic Invertebrates

Product: No data available.

Components:

Fatty acids, tall-oil, diesters with polypropylene glycol	No data available.
Amines, soya alkyl, ethoxylated	No data available.
sodium hydroxide	No data available.

Toxicity to Aquatic Plants

Product: No data available.

Components:

Fatty acids, tall-oil, diesters with polypropylene glycol	No data available.
Amines, soya alkyl, ethoxylated	No data available.
sodium hydroxide	No data available.

Toxicity to microorganisms

Product: No data available.

Components:

Fatty acids, tall-oil, diesters with polypropylene glycol	No data available.
Amines, soya alkyl, ethoxylated	No data available.
sodium hydroxide	No data available.

Persistence and Degradability

Biodegradation

Product: No data available.

Components:

Fatty acids, tall-oil, diesters with polypropylene glycol	No data available.
Amines, soya alkyl, ethoxylated	No data available.
sodium hydroxide	No data available.

BOD/COD Ratio

Product: No data available.

Components:

Fatty acids, tall-oil, diesters with polypropylene glycol	No data available.
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Amines, soya alkyl,
ethoxylated
sodium hydroxide No data available.
No data available.

Bioaccumulative potential

Bioconcentration Factor (BCF)

Product: No data available.

Components:

Fatty acids, tall-oil,
diesters with
polypropylene glycol No data available.
Amines, soya alkyl,
ethoxylated No data available.
sodium hydroxide No data available.

Partition Coefficient n-octanol / water (log Kow)

Product: No data available.

Components:

Fatty acids, tall-oil,
diesters with
polypropylene glycol No data available.
Amines, soya alkyl,
ethoxylated No data available.
sodium hydroxide No data available.

Mobility in soil:

Product No data available.

Components:

Fatty acids, tall-oil,
diesters with
polypropylene glycol No data available.
Amines, soya alkyl,
ethoxylated No data available.
sodium hydroxide No data available.

Other adverse effects:

Other hazards

Product: The product is classified as slightly hazardous to waters (according to the German Regulation on the Classification of Substances Hazardous to Waters (WwSV). Do not allow to enter soil, waterways or waste water canal.

13. Disposal considerations

Disposal methods: The product should not be allowed to enter drains, water courses or the soil; dispose of this material and its container in a safe way.

Contaminated Packaging: If empty contaminated containers are recycled or disposed of, the receiver must be informed about possible hazards.

14. Transport information

International Regulations

UNRTDG

Not regulated as a dangerous good

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

15. Regulatory information

International regulations

Montreal protocol

Not applicable

Stockholm convention

Not applicable

Rotterdam convention

Not applicable

Kyoto protocol

Not applicable

16. Other information, including date of preparation or last revision

Issue Date: 04.03.2019

Version #: 1.1

Abbreviations and acronyms:

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO -

International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Further Information: No data available.

Revision Information: Changes since the last version are highlighted in the margin. This version replaces all previous versions.

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