

# ESKANOL EF SOLUTION

## Safety Data Sheet

according to the Model Work Health and Safety Regulations

Issue date: Revision date: 28/04/2021 Version: 1.2

SDS No: 00359-1298



### SECTION 1: Product identifier

#### 1.1. GHS Product identifier

Product form : Mixture  
Product name : ESKANOL EF SOLUTION  
Product code : 10019, 10020

#### 1.2. Other means of identification

No additional information available

#### 1.3. Recommended use of the chemical and restrictions on use

Recommended use : Binding agent

#### 1.4. Details of manufacturer or importer

##### Supplier

TIP TOP Oberflächenschutz Elbe GmbH  
4 Heuweg  
Wittenberg 6886  
Germany  
T +49(0)3491/635-50 - F +49(0)3491/635-552

##### Importer

REMA TIP TOP Australia Pty Ltd.  
3 - 7 Ironbark Close  
Warabrook NSW 2304  
Australia  
T +61-2-4935-0200  
[www.rema-tiptop.com.au](http://www.rema-tiptop.com.au)

E-mail address of competent person responsible for the SDS: [sds@gbk-ingelheim.de](mailto:sds@gbk-ingelheim.de)

#### 1.5. Emergency phone number

Emergency number : +61-280735031, Infotrac/GBK GmbH-ID: 93591

### SECTION 2: Hazard identification

#### 2.1. Classification of the hazardous chemical

##### Classification according to the model Work Health and Safety Regulations (WHS Regulations)

Skin corrosion/irritation, Category 2	H315
Serious eye damage/eye irritation, Category 2A	H319
Skin sensitisation, Category 1	H317
Hazardous to the aquatic environment — Chronic Hazard, Category 2	H411

#### 2.2. GHS Label elements, including precautionary statements

Hazard pictograms (GHS AU) :



Exclamation mark Environment

Signal word (GHS AU) :

Warning

Contains :

bis-[4-(2,3-epoxipropoxy)phenyl]propane (< 60 %); Reaction products of hexane-1,6-diol with 2-(chloromethyl)oxirane (< 25 %); Bisphenol-F epoxy resin (< 20 %); Phenol, methylstyrenated (< 10 %)

Hazard statements (GHS AU) :

H315 - Causes skin irritation  
H317 - May cause an allergic skin reaction  
H319 - Causes serious eye irritation  
H411 - Toxic to aquatic life with long lasting effects

Precautionary statements (GHS AU) :

P261 - Avoid breathing vapours.  
P264 - Wash hands thoroughly after handling.  
P272 - Contaminated work clothing should not be allowed out of the workplace.

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P273 - Avoid release to the environment.  
P280 - Wear eye protection, face protection, protective gloves, protective clothing.  
P302+P352 - IF ON SKIN: Wash with plenty of soap and water.  
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P333+P313 - If skin irritation or rash occurs: Get medical attention.  
P337+P313 - If eye irritation persists: Get medical attention.  
P362+P364 - Take off contaminated clothing and wash it before reuse.  
P391 - Collect spillage.  
P501 - Dispose of contents and container to a hazardous or special waste collection point.

### 2.3. Other hazards which do not result in classification

No additional information available

## SECTION 3: Composition and information on ingredients

Comments : Mixture of the substances listed below with harmless additives.

Name	CAS-No.	%	Classification according to the model Work Health and Safety Regulations (WHS Regulations)
bis-[4-(2,3-epoxipropoxy)phenyl]propane	1675-54-3	< 60	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1, H317 Aquatic Chronic 2, H411
Reaction products of hexane-1,6-diol with 2-(chloromethyl)oxirane	933999-84-9	< 25	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1, H317 Aquatic Chronic 3, H412
Bisphenol-F epoxy resin	9003-36-5	< 20	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1, H317 Aquatic Chronic 2, H411
Phenol, methylstyrenated	68512-30-1	< 10	Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Chronic 3, H412

## SECTION 4: First aid measures

### 4.1. Description of necessary first-aid measures

First-aid measures general : Take off immediately all contaminated clothing. In the event of persistent symptoms receive medical treatment.

First-aid measures after inhalation : Move to fresh air in case of accidental inhalation of vapours or decomposition products. In the event of persistent symptoms receive medical treatment.

First-aid measures after skin contact : Wash off immediately with soap and plenty of water. Get medical advice if skin irritation persists.

First-aid measures after eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Consult an eye specialist.

First-aid measures after ingestion : Do not induce vomiting. Drink plenty of water or milk. Never give anything by mouth to an unconscious person. Call a physician immediately. Do not induce vomiting without medical advice.

### 4.2. Symptoms caused by exposure

Symptoms/effects after skin contact : May cause an allergic skin reaction. Causes skin irritation.

Symptoms/effects after eye contact : Causes serious eye irritation.

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### 4.3. Medical attention and special treatment

Treatment : Treat symptomatically.

## SECTION 5: Fire-fighting measures

### 5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Alcohol resistant foam. Carbon dioxide.

Unsuitable extinguishing media : high volume water jet.

### 5.2. Specific hazards arising from the chemical

General measures : In case of vapour formation use adequate respirator. Ensure adequate air ventilation. Concerning personal protective equipment to use, see section 8.

Hazardous decomposition products in case of fire : Carbon monoxide. Carbon dioxide. Phenoles.

### 5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

Hazchem Code : \* 3Z

Other information : Cool containers / tanks with spray water if possible. Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations. Collect contaminated firefighting water separately, must not be discharged into the drains.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

General measures : In case of vapour formation use adequate respirator. Ensure adequate air ventilation. Concerning personal protective equipment to use, see section 8.

#### 6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid contact with skin and eyes.

#### 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

### 6.2. Environmental precautions

Do not discharge into the drains/surface waters/groundwater. Clean contaminated surface thoroughly.

### 6.3. Methods and materials for containment and cleaning up

Methods for cleaning up : Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Shovel or sweep up and put in a closed container for disposal.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Keep the container tightly closed. Provide appropriate exhaust ventilation at places of dust forming. Avoid contact with skin, eyes and clothing.

### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep container tightly closed in a dry, cool and well-ventilated place. Keep out of direct sunlight.

Incompatible materials : oxidizing materials. Amines. Acids. Bases.

Storage temperature : 10 – 30 °C

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Information on mixed storage : Keep away from food, drink and animal feeding stuffs.

### SECTION 8: Exposure controls and personal protection

#### 8.1. Control parameters - exposure standards

No additional information available

#### 8.2. Biological Monitoring

No additional information available

#### 8.3. Engineering controls

Appropriate engineering controls : Pay attention to explosion protection guidelines. Ensure good ventilation of the work station.

#### 8.4. Individual protection measures, such as personal protective equipment (PPE)

Hand protection : This recommendation refers exclusively to the chemical compatibility and the lab test conforming to EN 374 carried out under lab conditions. Requirements can vary as a function of the use. Therefore it is necessary to adhere additionally to the recommendations given by the manufacturer of protective gloves. Pls. find examples in the protective gloves database under: <http://bestglove.com/site/chemrest/>

Type	Material	Permeation	Thickness (mm)	Penetration	Standard
protective gloves	Fluoro-rubber (Viton) - FKM	2 (> 30 minutes)	0,7		EN ISO 374
protective gloves	Nitrile rubber (NBR)	1 (> 10 minutes)	0,4		EN ISO 374

Eye protection : Tightly fitting goggles (EN 166). Eyewash bottle with clean water (EN 15154)

Skin and body protection :

Type	Standard
Long sleeved protective clothing	EN ISO 6530

Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment

Device	Filter type	Condition	Standard
Respiratory protective device with a gas filter	Type A		EN 14387

Environmental exposure controls : Avoid release to the environment.

Other information : Do not inhale vapour. Wash hands before breaks and at the end of workday. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing before re-use. Avoid contact with skin, eyes and clothing.

### SECTION 9: Physical and chemical properties

Physical state : Liquid  
Appearance : No data available  
Colour : Transparent  
Odour : Slight  
Odour threshold : No data available  
pH : Not determined  
Relative evaporation rate (butylacetate=1) : No data available  
Melting point / Freezing point : No data available  
Boiling point : > 90 °C  
Flash point : > 93 °C  
Auto-ignition temperature : No data available  
Flammability (solid, gas) : No data available  
Vapour pressure : No data available  
Relative density : No data available  
Density : Density: 1.14 g/cm<sup>3</sup>  
Solubility : Water: Not miscible

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Log Pow	: No data available
Viscosity, dynamic	: 465 – 700 mPa·s
Explosive properties	: No data available
Explosive limits	: No data available
Minimum ignition energy	: No data available
VOC content	: < 5 %
Fat solubility	: No data available

### SECTION 10: Stability and reactivity

Reactivity	: No decomposition if stored and applied as directed.
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: Reactions with acids, alkalis and oxidizing agents. Amines.
Conditions to avoid	: To avoid thermal decomposition, do not overheat. Keep out of direct sunlight.
Incompatible materials	: Oxidizing agent. Amines. Acids. Bases.
Hazardous decomposition products	: Fire may produce: Carbon monoxide. Carbon dioxide. Phenoles.

### SECTION 11: Toxicological information

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

Bisphenol-F epoxy resin (9003-36-5)	
LD50 oral rat	> 2000 mg/kg
LD50 dermal rat	> 2000 mg/kg

Skin corrosion/irritation	: Causes skin irritation. pH: Not determined
Serious eye damage/irritation	: Causes serious eye irritation. pH: Not determined
Respiratory or skin sensitisation	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified

### SECTION 12: Ecological information

#### 12.1. Ecotoxicity

Hazardous to the aquatic environment, short-term (acute)	: Not classified
Hazardous to the aquatic environment, long-term (chronic)	: Toxic to aquatic life with long lasting effects.
Other information	: Do not flush into surface water or sewer system.

Bisphenol-F epoxy resin (9003-36-5)	
LC50 fish 1	2.54 mg/l
ErC50 algae	> 1000 mg/l

#### 12.2. Persistence and degradability

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Persistence and degradability	Not readily biodegradable.

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### 12.3. Bioaccumulative potential

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Bioaccumulative potential	No data available.
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### 12.4. Mobility in soil

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Ecology - soil	No data available.
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### 12.5. Other adverse effects

Ozone : Not classified  
Other adverse effects : Significantly hazardous to water.

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Fluorinated greenhouse gases	False
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#### Bisphenol-F epoxy resin (9003-36-5)

Fluorinated greenhouse gases	False
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#### bis-[4-(2,3-epoxipropoxy)phenyl]propane (1675-54-3)

Fluorinated greenhouse gases	False
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#### Reaction products of hexane-1,6-diol with 2-(chloromethyl)oxirane (933999-84-9)

Fluorinated greenhouse gases	False
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#### Phenol, methylstyrenated (68512-30-1)

Fluorinated greenhouse gases	False
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## SECTION 13: Disposal considerations

Waste treatment methods : Recycling is preferred to disposal or incineration. Can be incinerated according to local regulations. Dispose of contents/container in accordance with licensed collector's sorting instructions.

Product/Packaging disposal recommendations : Packaging that cannot be cleaned should be disposed of like the product. Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse. Empty containers should be taken for local recycling, recovery or waste disposal.

Additional information : Flammable vapours may accumulate in the container.

## SECTION 14: Transport information

ADG	IMDG	IATA
<b>14.1. UN number</b>		
3082	3082	3082
<b>14.2. UN Proper Shipping Name</b>		
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxy resin)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxy resin)	Environmentally hazardous substance, liquid, n.o.s. (Epoxy resin)
<b>14.3. Transport hazard class(es)</b>		
9	9	9

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ADG	IMDG	IATA
<b>14.4. Packing group</b>		
III - substances presenting low danger	III	III
<b>14.5. Environmental hazards</b>		
Dangerous for the environment: Yes	Dangerous for the environment: Yes Marine pollutant: Yes	Dangerous for the environment: Yes

### 14.6. Special precautions for user

Specific storage requirement : No data available  
Shock sensitivity : No data available

### 14.7. Additional information

Other information : No supplementary information available

#### Transport by road and rail

UN-No. (ADG) : 3082  
Special provision (ADG) : 274, 331, 335, 375, AU01  
Limited quantities (ADG) : 5l  
Excepted quantities (ADG) : E1  
Packing instructions (ADG) : P001, IBC03, LP01  
Special packing provisions (ADG) : PP1  
Portable tank and bulk container instructions (ADG) : T4  
Portable tank and bulk container special provisions (ADG) : TP1, TP29

#### Transport by sea

UN-No. (IMDG) : 3082  
Transport regulations (IMDG) : Transport in accordance with section 2.3.2.5 of the IMDG (viscous substance) may be applied  
Special provisions (IMDG) : 274, 335, 969  
Limited quantities (IMDG) : 5 L  
Excepted quantities (IMDG) : E1  
Packing instructions (IMDG) : LP01, P001  
Special packing provisions (IMDG) : PP1  
IBC packing instructions (IMDG) : IBC03  
Tank instructions (IMDG) : T4  
Tank special provisions (IMDG) : TP1, TP29  
EmS-No. (Fire) : F-A - FIRE SCHEDULE Alfa - GENERAL FIRE SCHEDULE  
EmS-No. (Spillage) : S-F - SPILLAGE SCHEDULE Foxtrot - WATER-SOLUBLE MARINE POLLUTANTS  
Stowage category (IMDG) : A

#### Air transport

UN-No. (IATA) : 3082  
PCA Excepted quantities (IATA) : E1  
PCA Limited quantities (IATA) : Y964  
PCA limited quantity max net quantity (IATA) : 30kgG  
PCA packing instructions (IATA) : 964  
PCA max net quantity (IATA) : 450L  
CAO packing instructions (IATA) : 964  
CAO max net quantity (IATA) : 450L  
Special provisions (IATA) : A97, A158, A197, A215  
ERG code (IATA) : 9L

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### 14.8. Hazchem or Emergency Action Code

Hazchem Code : \* 3Z

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations specific for the product in question

No additional information available

### 15.2. International agreements

No additional information available

## SECTION 16: Other information

Abbreviations and acronyms : ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road  
ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways  
IATA - International Air Transport Association  
IMDG - International Maritime Dangerous Goods  
RID - Regulations concerning the International Carriage of Dangerous Goods by Rail  
DOT - Department of Transport  
TDG - Transportation of Dangerous Goods  
REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006  
GHS - Globally Harmonized System of Classification, Labelling and Packaging of Chemicals  
IARC - International Agency for Research on Cancer  
vPvB - Very Persistent and Very Bioaccumulative  
PBT - Persistent Bioaccumulative Toxic  
PNEC - Predicted No-Effect Concentration  
CAS - CAS (Chemical Abstracts Service) number  
IBC-Code - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk  
ATE - Acute Toxicity Estimate  
CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008  
BCF - Bioconcentration factor  
MARPOL 73/78 - MARPOL 73/78: International Convention for the Prevention of Pollution From Ships  
ADG - Transport of Australian Dangerous Goods

Revision date : 28/04/2021

Other information : Data of sections 4 to 8, as well as 10 to 12, do partly not refer to the use and the regular employing of the product (in this sense consult information on use and on product), but to liberation of major amounts in case of accidents and irregularities. The information describes exclusively the safety requirements for the product(s) and is based on the present level of our knowledge. The delivery specifications are contained in the corresponding product sheet. This data does not constitute a guarantee for the characteristics of the product(s) as defined by the legal warranty regulations.

Classification	
Skin Irrit. 2	H315
Eye Irrit. 2A	H319
Skin Sens. 1	H317
Aquatic Chronic 2	H411



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Full text of H-statements	
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
Eye Irrit. 2A	Serious eye damage/eye irritation, Category 2A
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H411	Toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should therefore not be construed as guaranteeing any specific property of the product.