

SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

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Revision Number 2

EGHS / English

Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product Name EpoKwick FC Resin

Product Code(s) 20-3453-128

(M)SDS Number 1364504_E

Chemical name

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

Recommended Use Laboratory Use Only.

Uses advised against No information available.

1.3. Details of the supplier of the safety data sheet

Manufacturer ITW Test & Measurement GmbH

Manufacturer Address Boschstraße 10

73734 Esslingen am Neckar / GERMANY

www.buehler-met.de www.buehler.fr www.buehler.co.uk

Phone number +49 (0) 711 4904690-0

E-mail Address lab.eu@buehler.com

1.4. Emergency telephone number

Global Access Code: 334545 Americas: +1 760 476 3962

Americas: +1 760 476 3962 Europe: +1 760 476 3961 Middle East/Africa: +1 760 476 3959 Asia Pacific: +1 760 476 3960

UK: +44 8 08 189 0979

Europe 112

Section 2: HAZARDS IDENTIFICATION



2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

| Skin corrosion/irritation | Category 2 - (H315) |
|-----------------------------------|---------------------|
| Serious eye damage/eye irritation | Category 2 - (H319) |
| Skin sensitization | Category 1 - (H317) |

2.2. Label elements



Signal word Warning

Hazard Statements

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H317 - May cause an allergic skin reaction

Precautionary Statements - EU (§28, 1272/2008)

P280 - Wear protective gloves and eye/face protection

P273 - Avoid release to the environment

P264 - Wash hands thoroughly after handling

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P337 + P313 - If eye irritation persists: Get medical advice/attention

P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention

2.3. Other hazards

No information available

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Not applicable.

3.2 Mixtures

| Chemical name | EC No | CAS No | Weight-% | Classification according to Regulation (EC) No. 1272/2008 [CLP] | REACH registration number |
|---|-----------|------------|----------|---|---------------------------|
| Phenol, polymer with formaldehyde, glycidyl ether | - | 28064-14-4 | 70 - 90% | Skin Irrit. 2 (H315) Skin Sens. 1 (H317) Eye Irrit. 2 (H319)Chronic 2 (H411) | |
| Alkyl (C12-14) glycidyl | 271-846-8 | 68609-97-2 | 5 - 15% | Skin Irrit. 2 (H315) | |



| ether | | | | Skin Sens. 1 (H317) | |
|---|-----------|------------|---------|---|--|
| Oxirane, [[(2-ethylhexyl)oxy]methyl | 219-553-6 | 2461-15-6 | 0 - 10% | No data available | |
|]- | | | | | |
| 2-Propenoic acid, 1,4-butanediyl ester | - | 1070-70-8 | 0 - 10% | Acute Tox. 4 (H312) Skin Corr. 1B (H314) | |
| 1,4-butanearyr ester | | | | Skin Sens. 1 (H317) | |
| Bisphenol A - | 500-033-5 | 25068-38-6 | 0 - 5% | Skin Irrit. 2 (H315) | |
| Epichlorohydrin polymer | | | | Eye Irrit. 2 (H319) | |
| | | | | Skin Sens. 1 (H317) | |
| | | | | Aquatic Chronic 2 | |
| | | | | (H411) | |

Full text of H- and EUH-phrases: see section 16

This product does not contain candidate substances of very high concern at a concentration >=0.1% (Regulation (EC)

No. 1907/2006 (REACH), Article 59)

| 110: 100172000 (11271011); 7111010 00) | | |
|--|------------|-----------------|
| Chemical name | CAS No | SVHC candidates |
| Phenol, polymer with | 28064-14-4 | - |
| formaldehyde, glycidyl ether | | |
| Alkyl (C12-14) glycidyl ether | 68609-97-2 | - |
| Oxirane, | 2461-15-6 | - |
| [[(2-ethylhexyl)oxy]methyl]- | | |
| 2-Propenoic acid, 1,4-butanediyl | 1070-70-8 | - |
| ester | | |
| Bisphenol A - Epichlorohydrin | 25068-38-6 | - |
| polymer | | |

Section 4: FIRST AID MEASURES

4.1. Description of first aid measures

General advice Show this safety data sheet to the doctor in attendance. Immediate medical

attention is required.

Inhalation Remove to fresh air. Get medical attention immediately if symptoms occur.

Skin contact Wash off immediately with soap and plenty of water while removing all

contaminated clothes and shoes. May cause an allergic skin reaction. If symptoms

persist, call a physician.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15

minutes. Keep eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical

advice/attention.

Ingestion Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of

water. Never give anything by mouth to an unconscious person. Call a physician.

Self-protection of the first aider Remove all sources of ignition. Ensure that medical personnel are aware of the

material(s) involved, take precautions to protect themselves and prevent spread of contamination. Wear personal protective clothing (see section 8). Avoid contact

with skin, eyes or clothing.

4.2. Most important symptoms and effects, both acute and delayed



Symptoms Burning sensation. Itching. Rashes. Hives.

4.3. Indication of any immediate medical attention and special treatment needed

Note to physicians May cause sensitization in susceptible persons. Treat symptomatically.

Section 5: FIRE FIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media Dry chemical, Carbon dioxide (CO2), Water spray, Alcohol resistant foam.

Unsuitable extinguishing media No information available.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical

Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray. Product is or contains a sensitizer. May cause sensitization by skin contact.

Hazardous Combustion Products

Carbon oxides.

5.3. Advice for firefighters

Special protective equipment for fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

Section 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Evacuate personnel to safe areas. Use personal protective equipment as required.

See section 8 for more information. Take precautionary measures against static discharges. Do not touch or walk through spilled material. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Keep people away from and upwind

of spill/leak.

Other Information Refer to protective measures listed in Sections 7 and 8.

For emergency responders Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions Refer to protective measures listed in Sections 7 and 8. Prevent further leakage or

spillage if safe to do so.

6.3. Methods and material for containment and cleaning up

Methods for containmentStop leak if you can do it without risk. Do not touch or walk through spilled

material. Dike far ahead of liquid spill for later disposal.

Methods for cleaning up Take precautionary measures against static discharges. Dam up. Soak up with

inert absorbent material. Pick up and transfer to properly labeled containers.



6.4. Reference to other sections

Reference to other sections See section 8 for more information. See section 13 for more information.

Section 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

heat/sparks/open flames/hot surfaces. - No smoking. Take precautionary measures against static discharges. Use with local exhaust ventilation. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. In case

of insufficient ventilation, wear suitable respiratory equipment. Take off contaminated clothing and wash before reuse.

General Hygiene Considerations Do not eat, drink or smoke when using this product. Contaminated work clothing

should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes or clothing. Wear suitable

gloves and eye/face protection.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away

from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labeled containers. Store in accordance with the particular national regulations. Store in accordance with local

regulations. Store locked up. Keep out of the reach of children.

7.3. Specific end use(s)

Risk Management Methods

(RMM)

The information required is contained in this Material Safety Data Sheet.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Exposure Limits This product, as supplied, does not contain any hazardous materials with

occupational exposure limits established by the region specific regulatory bodies

Derived No Effect Level (DNEL) No information available

Predicted No Effect Concentration (PNEC) No information available

8.2. Exposure controls

Personal protective equipment

Eye/face protection Tight sealing safety goggles.

Hand Protection Wear suitable gloves. Impervious gloves.



Skin and body protection Wear suitable protective clothing. Long sleeved clothing.

Environmental exposure

controls

No information available.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state Liquid
Appearance Clear
Odor Sweet

ColorNo information availableOdor ThresholdNo data available

Property Values Remarks Method

pH No data available

Melting / freezing point No data available None known

Boiling point / boiling range $> 150^{\circ}\text{C} ^{\circ}\text{C}$ Flash Point $> 93^{\circ}\text{C} ^{\circ}\text{C}$

Evaporation RateNo data availableNone knownFlammability (solid, gas)No data availableNone known

Flammability Limit in Air None known

Upper flammability limit

No data available

Lower flammability limit

No data available

Vapor pressure

No data available

Vapor pressureNo data availableNone knownVapor densityNo data availableNone known

Relative density 1.14 g/cm³ Water Solubility Immiscible

Solubility(ies) No data available None known

Partition coefficient: n-octanol/water No data available

Autoignition temperatureNo data availableNone knownDecomposition temperatureNo data availableNone knownKinematic viscosityNo data availableNone knownViscosityNo data availableNone known

9.2. Other information

Softening Point No information available
Molecular Weight No information available

VOC Content (%) 0 %

Liquid Density

Bulk Density

Particle Size

Particle Size Distribution

No information available
No information available
No information available
No information available

Section 10: STABILITY AND REACTIVITY

10.1. Reactivity

No data available.

10.2. Chemical stability

Stable under normal conditions.

Explosion Data



Sensitivity to Mechanical Impact None.
Sensitivity to Static Discharge None.

10.3. Possibility of hazardous reactions

Possibility of Hazardous

None under normal processing.

Reactions

Hazardous Polymerization Hazardous polymerization does not occur.

10.4. Conditions to avoid

Heat, flames and sparks.

10.5. Incompatible materials

Strong acids, Strong bases, Strong oxidizing agents.

10.6. Hazardous decomposition products

Carbon oxides.

Section 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Information on likely routes of exposure

Product Information

Inhalation Specific test data for the substance or mixture is not available. May cause irritation

of respiratory tract.

Eye contact Specific test data for the substance or mixture is not available. Severely irritating

to eyes. Causes serious eye damage. May cause burns. May cause irreversible

damage to eyes. (based on components).

Skin contact Specific test data for the substance or mixture is not available. May cause

irritation. Causes skin irritation. (based on components). May be absorbed through

the skin in harmful amounts. Harmful in contact with skin.

Ingestion Specific test data for the substance or mixture is not available. Ingestion may

cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Information on toxicological effects

Symptoms Redness. Burning. May cause blindness. Itching. Rashes. Hives. May cause

redness and tearing of the eyes.

Numerical measures of toxicity

Acute Toxicity

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral) 3,071.00 mg/kg
ATEmix (dermal) 1,100.00 mg/kg



Unknown acute toxicity

100 % of the mixture consists of ingredient(s) of unknown toxicity

80 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

97 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity

100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)

100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)

100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

Component Information

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|-------------------------------|-----------------------|-------------|-----------------|
| Alkyl (C12-14) glycidyl ether | = 17100 mg/kg (Rat) | - | - |
| Oxirane, | = 7800 mg/kg (Rat) | - | - |
| [[(2-ethylhexyl)oxy]methyl]- | | | |
| 2-Propenoic acid, | = 587 mg/kg (Rat) | - | - |
| 1,4-butanediyl ester | | | |
| Bisphenol A - | = 11400 mg/kg (Rat) | - | - |
| Epichlorohydrin polymer | | | |

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation Classification based on data available for ingredients. Irritating to skin.

Serious eye damage/eye

Classification based on data available for ingredients. Causes burns. Risk of

irritation

serious damage to eyes.

Respiratory or skin sensitization May cause sensitization by skin contact.

Germ cell mutagenicity No information available.

Carcinogenicity No information available.

Reproductive ToxicityNo information available.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Aspiration hazard No information available.

Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecotoxicity Toxic to aquatic life with long lasting effects.

12.2. Persistence and degradability

Persistence and Degradability No information available.



12.3. Bioaccumulative potential

Bioaccumulation No information available.

12.4. Mobility in soil

Mobility in soil No information available.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment No information available.

| Chemical name | PBT and vPvB assessment |
|---------------------------------------|-------------------------|
| Alkyl (C12-14) glycidyl ether | Not applicable |
| Oxirane, [[(2-ethylhexyl)oxy]methyl]- | Not applicable |
| Bisphenol A - Epichlorohydrin polymer | Not applicable |

12.6. Other adverse effects

Other adverse effects No information available.

Endocrine Disruptor Information

| Chemical name | • | EU - Endocrine Disruptors - Evaluated Substances |
|---------------------------------------|--------------------|---|
| Bisphenol A - Epichlorohydrin polymer | Group III Chemical | - |

Section 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from residues/unused

products

Dispose of in accordance with local regulations. Dispose of waste in accordance

with environmental legislation.

Contaminated packaging No information available.

Section 14: TRANSPORT INFORMATION

IMDG/IMONOT REGULATED14.1 UN-No.Not Regulated14.2 Proper Shipping NameNOT REGULATED14.3 Hazard ClassNOT REGULATED14.4 Packing GroupNOT REGULATED14.5 Marine PollutantNot applicable

14.6 Special Provisions None

14.7 Transport in bulk No information available

according to Annex II of MARPOL and the IBC Code

RIDNOT REGULATED14.1 UN-No.NOT REGULATED14.2 Proper Shipping NameNOT REGULATED14.3 Hazard ClassNOT REGULATED14.4 Packing GroupNOT REGULATED



| 14.5 | Environmental hazard | Not applicable |
|------|------------------------|----------------|
| 440 | On a stat Descriptions | Mana |

| ne |
|----|
| |

| <u>ADR</u> | NOT REGULATED |
|---------------------------|----------------|
| 14.1 UN-No. | NOT REGULATED |
| 14.2 Proper Shipping Name | NOT REGULATED |
| 14.3 Hazard Class | NOT REGULATED |
| 14.4 Packing Group | NOT REGULATED |
| 14.5 Environmental hazard | Not applicable |
| 14.6 Special Provisions | None |

| <u>IATA</u> | NOT REGULATED |
|---------------------------|----------------|
| 14.1 UN-No. | NOT REGULATED |
| 14.2 Proper Shipping Name | NON REGULATED |
| 14.3 Hazard Class | NOT REGULATED |
| 14.4 Packing Group | NOT REGULATED |
| 14.5 Environmental hazard | Not applicable |

14.6 Special Provisions None

Section 14: TRANSPORT INFORMATION

| IMDG/IMO | NOT REGULATED |
|---------------------------|----------------|
| 14.1 UN-No. | Not Regulated |
| 14.2 Proper Shipping Name | NOT REGULATED |
| 14.3 Hazard Class | NOT REGULATED |
| 14.4 Packing Group | NOT REGULATED |
| 14.5 Marine Pollutant | Not applicable |
| 4400 !!В !! | NI |

14.6 Special Provisions None

14.7 Transport in bulkNo information available

according to Annex II of MARPOL and the IBC Code

| RID | | NOT REGULATED |
|------|-----------------------------|----------------|
| 14.1 | UN-No. | NOT REGULATED |
| 14.2 | Proper Shipping Name | NOT REGULATED |
| 14.3 | Hazard Class | NOT REGULATED |
| 14.4 | Packing Group | NOT REGULATED |
| 14.5 | Environmental hazard | Not applicable |
| 14.6 | Special Provisions | None |

| <u>ADR</u> | NOT REGULATED |
|---------------------------|----------------|
| 14.1 UN-No. | NOT REGULATED |
| 14.2 Proper Shipping Name | NOT REGULATED |
| 14.3 Hazard Class | NOT REGULATED |
| 14.4 Packing Group | NOT REGULATED |
| 14.5 Environmental hazard | Not applicable |

14.6 Special Provisions None

| <u>IATA</u> | NOT REGULATED |
|---------------------------|---------------|
| 14.1 UN-No. | NOT REGULATED |
| 14.2 Proper Shipping Name | NON REGULATED |
| 14.3 Hazard Class | NOT REGULATED |



14.4 Packing Group14.5 Environmental hazardNOT REGULATEDNot applicable

14.6 Special Provisions None

Section 15: REGULATORY INFORMATION

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

National regulations

France

Occupational Illnesses (R-463-3, France)

| Chemical name | French RG number | Title |
|--|------------------|-------|
| 2-Propenoic acid, 1,4-butanediyl ester | RG 65 | - |
| 1070-70-8 | | |

Water hazard class (WGK) hazardous to water (WGK 2)

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work .

Authorizations and/or restrictions on use:

This product does not contain substances subject to authorization (Regulation (EC) No. 1907/2006 (REACH), Annex XIV). This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII).

Persistent Organic Pollutants

Not applicable.

Dangerous substance category per Seveso Directive (2012/18/EU)

E2 - Hazardous to the Aquatic Environment in Category Chronic 2

Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not applicable.

International Inventories

TSCA Contact supplier for inventory compliance status. DSL/NDSL Contact supplier for inventory compliance status. **EINECS/ELINCS** Contact supplier for inventory compliance status. Contact supplier for inventory compliance status. **ENCS IECSC** Contact supplier for inventory compliance status. **KECL** Contact supplier for inventory compliance status. Contact supplier for inventory compliance status. **PICCS** Contact supplier for inventory compliance status. **AICS**

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances



ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

15.2. Chemical safety assessment

No information available.

Section 16: OTHER INFORMATION

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

Full text of H-Statements referred to under sections 2 and 3

H312 - Harmful in contact with skin

H314 - Causes severe skin burns and eye damage

H317 - May cause an allergic skin reaction

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H411 - Toxic to aquatic life with long lasting effects

Legend

SVHC: Substances of Very High Concern for Authorization:

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)

Ceiling Maximum limit value - Skin designation

Key literature references and sources for data

www.ChemADVISOR.com/

Prepared By Product Stewardship

23 British American Blvd. Latham, NY 12110 1-800-572-6501

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This safety data sheet complies with the requirements of: Regulation (EC) No. 1907/2006.

Disclaimer

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End of Safety Data Sheet

