

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

Issuing Date 05-Aug-2016

Revision Date 13-Apr-2017

Revision Number 4

EGHS / English

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

1.1. Product identifier

Product Name EpoMet F & G

Product Code(s) 20-3380-064, 20-3380-160, 20-3380-400, 20-3380-500, 20-3381-070,
20-3381-160, 20-3381-400

(M)SDS Number 1340858_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
Middle East/Africa: +1 760 476 3959
UK: +44 8 08 189 0979

Europe: +1 760 476 3961
Asia Pacific: +1 760 476 3960

Section 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture**Regulation (EC) No 1272/2008**

Acute toxicity - Oral	Category 4 - (H302)
Skin corrosion/irritation	Category 2 - (H315)
Serious eye damage/eye irritation	Category 2 - (H319)

2.2. Label elements**Signal word****Warning****Hazard Statements**

H302 - Harmful if swallowed

H315 - Causes skin irritation

H319 - Causes serious eye irritation

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

P260 - Do not breathe dust

P280 - Wear protective gloves and eye/face protection

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

P301 + P330 + P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

P312 - Call a POISON CENTER or doctor if you feel unwell

P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable

2.3. Other hazards

No information available

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS**3.1 Substances**

Chemical name	EC No	CAS No	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]	REACH registration number
Silica, fused	262-373-8 424-440-1	60676-86-0	60 - 80%	No data available	
Phenol, 4,4'-(1-methylethylidene) bis[2,6-dibromo-, polymer with (chloromethyl)oxirane and 4,4'-(1-methylethylidene) bis[phenol]	-	26265-08-7	20 - 30%	No data available	

2,4,6-Tri(dimethylaminomethyl)phenol	202-013-9	90-72-2	1 - 2%	Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319)	
Titanium dioxide	236-675-5	13463-67-7	0 - 1%	No data available	
Carbon black	Present	1333-86-4	0 - 1%	No data available	

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

This product does not contain candidate substances of very high concern at a concentration $\geq 0.1\%$ (Regulation (EC) No. 1907/2006 (REACH), Article 59)

Chemical name	CAS No	SVHC candidates
Silica, fused	60676-86-0	-
Phenol, 4,4`-(1-methylethylidene)bis[2,6-di bromo-, polymer with (chloromethyl)oxirane and 4,4`-(1-methylethylidene)bis[pheno l]	26265-08-7	-
2,4,6-Tri(dimethylaminomethyl)phenol	90-72-2	-
Titanium dioxide	13463-67-7	-
Carbon black	1333-86-4	-

Section 4: FIRST AID MEASURES

4.1. Description of first aid measures

General advice	Show this safety data sheet to the doctor in attendance.
Inhalation	Remove to fresh air.
Skin contact	Wash off immediately with plenty of water for at least 15 minutes. If symptoms persist, call a physician.
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
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	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).

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

Symptoms No information available.

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

Note to physicians Treat symptomatically.

Section 5: FIRE FIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media No information available.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

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 Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required.

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 Prevent further leakage or spillage if safe to do so.

6.3. Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Take up mechanically, placing in appropriate containers for disposal.

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

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation.

General Hygiene Considerations 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 out of the reach of children. Store locked up.

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**

Chemical name	EU	United Kingdom	France	Spain	Germany
Silica, fused 60676-86-0	-	STEL: 0.24 mg/m ³ TWA: 0.08 mg/m ³	-	-	TWA: 0.3 mg/m ³
Titanium dioxide 13463-67-7	-	STEL: 30 mg/m ³ STEL: 12 mg/m ³ TWA: 10 mg/m ³ TWA: 4 mg/m ³	TWA: 10 mg/m ³	TWA: 10 mg/m ³	-
Carbon black 1333-86-4	-	STEL: 7 mg/m ³ TWA: 3.5 mg/m ³	TWA: 3.5 mg/m ³	TWA: 3.5 mg/m ³	-
Chemical name	Italy	Portugal	Netherlands	Finland	Denmark
Silica, fused 60676-86-0	-	-	-	-	TWA: 0.1 mg/m ³
Titanium dioxide 13463-67-7	-	TWA: 10 mg/m ³	-	-	TWA: 6 mg/m ³
Carbon black 1333-86-4	-	TWA: 3.5 mg/m ³	-	TWA: 3.5 mg/m ³ STEL: 7 mg/m ³	TWA: 3.5 mg/m ³
Chemical name	Austria	Switzerland	Poland	Norway	Ireland
Silica, fused 60676-86-0	TWA: 0.3 mg/m ³	TWA: 0.3 mg/m ³	TWA: 2.0 mg/m ³ TWA: 1.0 mg/m ³	-	TWA: 0.08 mg/m ³ STEL: 0.24 mg/m ³
Titanium dioxide 13463-67-7	STEL 10 mg/m ³ TWA: 5 mg/m ³	TWA: 3 mg/m ³	STEL: 30 mg/m ³ TWA: 10.0 mg/m ³ TWA: 10 mg/m ³	TWA: 5 mg/m ³ STEL: 10 mg/m ³	TWA: 10 mg/m ³ TWA: 4 mg/m ³ STEL: 30 mg/m ³ STEL: 12 mg/m ³
Carbon black 1333-86-4	-	-	TWA: 4.0 mg/m ³	TWA: 3.5 mg/m ³ STEL: 7 mg/m ³	TWA: 3 mg/m ³ STEL: 15 mg/m ³

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** Wear safety glasses with side shields (or goggles).
- Hand Protection** Wear suitable 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	Granular
Appearance	Black
Odor	Mild
Color	No information available
Odor Threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks Method</u>
pH	No data available	None known
Melting / freezing point	Not applicable	None known
Boiling point / boiling range	Not applicable	None known
Flash Point	None	None known
Evaporation Rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air		None known
Upper flammability limit	No data available	
Lower flammability limit	No data available	
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Relative density	No data available	None known
Water Solubility	Insoluble in water	
Solubility(ies)	No data available	None known
Partition coefficient: n-octanol/water	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	No data available	None known
Viscosity	No data available	None known

9.2. Other information

Softening Point	No information available
Molecular Weight	No information available
VOC Content (%)	0%
Liquid Density	No information available
Bulk Density	No information available
Particle Size	No information available
Particle Size Distribution	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 Reactions None under normal processing.

10.4. Conditions to avoid

None known.

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

None under normal use conditions.

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.
Eye contact	Specific test data for the substance or mixture is not available.
Skin contact	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. Harmful if swallowed. (based on components).

Information on toxicological effects

Symptoms No information available.

Numerical measures of toxicity

Acute Toxicity

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

ATEmix (oral)	1,698.00 mg/kg
ATEmix (dermal)	1,280.00 mg/kg

Unknown acute toxicity

- 100 % of the mixture consists of ingredient(s) of unknown toxicity
- 97 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
- 98 % 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)

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
2,4,6-Tri(dimethylaminomethyl)phenol	= 1200 mg/kg (Rat)	= 1280 mg/kg (Rat)	-

Titanium dioxide	> 10000 mg/kg (Rat)	-	-
Carbon black	> 15400 mg/kg (Rat)	> 3 g/kg (Rabbit)	-

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

Skin corrosion/irritation No information available.

Serious eye damage/eye irritation No information available.

Respiratory or skin sensitization No information available.

Germ cell mutagenicity No information available.

Carcinogenicity No information available.

Reproductive Toxicity No 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

Chemical name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Carbon black	-	-	-	24h EC50: > 5600 mg/L

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
2,4,6-Tri(dimethylaminomethyl)phenol	Not applicable
Titanium dioxide	
Carbon black	

12.6. Other adverse effects

Other adverse effects No information available.

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/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
14.6 Special Provisions None
14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code No information available

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

ADR

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

IATA

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
14.6 Special Provisions	None
14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code	No information available

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

ADR	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

IATA	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 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

Carbon black 1333-86-4	RG 16, RG 16bis	-
---------------------------	-----------------	---

Water hazard class (WGK) slightly hazardous to water (WGK 1)

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.

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.
ENCS	Contact supplier for inventory compliance status.
IECSC	Contact supplier for inventory compliance status.
KECL	Contact supplier for inventory compliance status.
PICCS	Contact supplier for inventory compliance status.
AICS	Contact supplier for inventory compliance status.

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

H302 - Harmful if swallowed
H315 - Causes skin irritation

H319 - Causes serious eye irritation
H312 - Harmful in contact with skin

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/

Issuing Date 01-Mar-2017

Revision Date 13-Apr-2017

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

Disclaimer

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. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.



The supplier identified below generated this SDS using the UL SDS template. UL did not test, certify, or approve the substance described in this SDS, and all information in this SDS was provided by the supplier or was reproduced from publically available regulatory data sources. UL makes no representations or warranties regarding the completeness or accuracy of the information in this SDS and disclaims all liability in connection with the use of this information or the substance described in this SDS. The layout, appearance and format of this SDS is © 2014 UL LLC. All rights reserved.

End of Safety Data Sheet