

# MATERIAL SAFETY DATA SHEET

In accordance with Regulation (EC) No. 1907/2006 (REACH) 2.0

## SOLKEM 3840

### 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY

#### 1.1 Identification of product

**1.1.1 Trade description:** SOLKEM 3840

#### 1.2 Relevant identified uses of the substance or / mixture and misadvised uses

##### 1.2.1 Recommended use

Binder for paints and lacquers. Exclusively for the production of coatings.

#### 1.3 Information concerning the supplier of safety data sheet

##### 1.3.1 Supplier

ECOAT SAS

1 avenue Louison Bobet

06130 GRASSE (France)

Telephone +33 (0) 4 93 40 74 54 - Telefax +33 (0) 9 71 70 58 32 - Email [produit@ecoat.fr](mailto:produit@ecoat.fr)

#### 1.4 Emergency call number

##### 1.4.1 Name, telephone number and addresses

Number ORFILA (INRS): + 33 (0) 1 45 42 59 59

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### 2. HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or the mixture

**Product definition:** Mixture

Classification Regulation (EC) No 1272/2008 (CLP):

Acute Tox. 4, H302

Acute Tox. 4, H312

Acute Tox 4, H332

Skin Irrit. 2, H315

Eye Irrit. 2, H319

#### 2.2 Elements of labeling

**Hazard pictograms:**



**Signal word:** Warning.

**Hazard statements:** H302+H312+H332 – Harmful if swallowed, in contact with skin or if inhaled.

H315 – Causes skin irritation.

H319 – Causes serious eye irritation.

#### Precautionary statements

**Prevention:** P261 – Avoid breathing vapour.

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

P233 – Keep container tightly closed.

P264 – Wash hands thoroughly after handling.

**Response:** P301+P312 – If swallowed: Call a POISON CENTER or physician if you feel unwell.

P302+P352 - If on skin: wash with plenty of 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.

**Storage:** P405 - Store locked up.

P235 – Keep cool.

**Disposal:** P501 - Dispose of contents/container in accordance with local regulation.

#### 2.3 Other dangers - Other hazards which do not result in classification:

The substance is not classified as PBT or vPvB according to current EU criteria.

### 3. COMPOSITION/INFORMATION ON THE COMPONENTS

**3.1 Substances/ 3.2 Mixtures:** Mixture

#### CAS number/other identifiers

CAS number : Not applicable

EC number : Mixture

#### Components:

In accordance with Regulation (EC) No. 1907/2006 (REACH), the product contains:

Product/ingredient name	Identifiers	%	Classification Regulation (EC) No. 1272/2008 [CLP]
2-butoxyethanol	REACH #: 01- 2119475108-36 CE: 203-905-0 CAS: 111-76-2 Index: 603-014-00-4	10-30	Acute Tox. 4 - H302 Acute Tox. 4 - H312 Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319

**Additional information:** For more information of the listed hazard phrases See section 16.

## **4. FIRST AID**

### **4.1. Description of first aid measures**

#### **4.1.1 General information**

If in doubt, or when symptoms persist, consult a doctor. If unconscious, place in the recovery position and get medical attention immediately. Do nothing by mouth to an unconscious person. In any case show the physician the safety data sheet.

#### **4.1.2 Inhalation**

Bring the victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel (give mouth-to-mouth resuscitation). If necessary, call a poison center or physician.

#### **4.1.3 Contact with the skin**

Immediately remove any soiled clothing. Wash immediately, abundantly with water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention following exposure or if feeling unwell. Wash clothing before reuse. Clean shoes thoroughly before reuse.

#### **4.1.4 Contact with the eyes**

Rinse immediately with much water, also under the eyelids. During at least 15 minutes. Get medical attention.

#### **4.1.5 Ingestion**

Do not induce vomiting to avoid the risk of aspiration into the respiratory track. Rinse out mouth and then drink plenty of water. Get medical attention.

### **4.2 Principal symptoms and effects, acute and differed**

**Inhalation :** Irritation of nose, throat and airway. In case of overexposure, organic solvents may depress the central nervous system causing dizziness and intoxication, and at very high concentrations unconsciousness and death.

**Ingestion :** May cause stomach pain or vomiting.

**Skin contact :** Prolonged contact may cause redness, irritation and dry skin.

**Eye contact :** May cause severe eye irritation.

### **4.3 Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

## **5. MEASUREMENTS OF FIRE CONTROL**

### **5.1 Means of extinction**

#### **5.1.1 Suitable means of extinction**

Use dry chemical powder, CO<sub>2</sub> or alcohol-resistant foam, or water fog.

Do not use water jet as an extinguisher, as this will spread the fire.

### **5.2 Particular Hazards resulting from the substance or the mixture**

Specific hazards : Oxides of the following substances : Carbon.

### **5.3 Advice for firemen**

Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Individual precautions, protection equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away. For emergency personnel: If specialized clothing is required to deal with the spillage, take note on information in Section 8.

### 6.2 Precautions for the environmental protection

Prevent the material penetration in the sewers or the rivers. Avoid penetration in the basement. Collect spillage.

### 6.3 Methods and equipment of containment and cleaning

Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor.

### 6.4 Reference to other sections

See Section 1 for emergency contact information.

See Section 8 for information on appropriate personal protective equipment.

See Section 13 for additional waste treatment information.

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## 7. HANDLING AND STORAGE

### 7.1. Precautions for safe handling:

#### Technical measures/Precautions:

**Hygiene measures:** Take off immediately all contaminated clothing. Avoid contact with the skin and the eyes. Avoid inhalation of vapors. When using do not eat, drink or smoke.

Wash hands after handling. Remove contaminated clothing and protective equipment before entering eating areas.

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

Keep in a dry, cool and well-ventilated place. Store in original container. Keep container tightly closed. Keep away from heat and sources of ignition. Store from the heat (<30°C, 86°F) and from freezing (>5°C, 41°F). Avoid long storage period.

### 7.3. Specific end use(s):

No further relevant information available.

## 8. CONTROL INDIVIDUAL EXPOSITION/PROTECTION

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

### 8.1 Parameters of control

#### Occupational exposure Limits

Product/ingredient name	Exposure Limits
2-butoxyethanol	Long-term exposure limit (8 hour TWA): WEL 25 ppm 123 mg/m <sup>3</sup> Short-term exposure limit (15 minute): WEL 50 ppm 246 mg/m <sup>3</sup> WEL: Workplace Exposure Limit

#### DNELs

Product/ingredient name	Type	Exposure	Value	Population	Effects
2-butoxyethanol	DNEL	Long term Dermal	125 mg/kg/day	Workers	Systemic
	DNEL	Long term Inhalation	98 mg/kg/day	Workers	Systemic
	DNEL	Long term Oral	6,3 mg/kg/day	Consumers	Systemic
	DNEL	Long term Inhalation	147 mg/m <sup>3</sup>	Consumers	Local
	DNEL	Long term Dermal	75 mg/kg/day	Consumers	Systemic

## 8.2. Exposure controls:

**Appropriate engineering controls:** Use only with adequate ventilation. Frequently monitor and control the working atmosphere. Avoid inhalation of vapours. Observe any occupational exposure limits for the product or ingredients.

### Personal protective equipment:

Respiratory protection: In case of insufficient ventilation, wear suitable respiratory equipment. In the case of hazardous fumes, wear self contained breathing apparatus that meets the appropriate standard or certification.

Eye/face protection: Safety glasses with side-shields (DIN EN 166).

Skin and body protection: Protective work clothing.

Hand protection: Specific protective gloves (DIN EN 374-3).

**Environmental exposure controls:** Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state at 20°C:	Viscous liquid.
Colour:	Brown.
Odour:	Solvent.
Odour threshold:	Not available.
pH:	Not available.
Initial boiling point:	170 °C approx.
Flash point:	65-67°C.
Flammability (solid, gas):	Not available.
Relative density:	Not available
Solubility in water:	Not available.
Partition coefficient :n-octanol/water:	Not available.
Auto-ignition temperature:	220-240°C.
Dynamic viscosity (room temperature °C):	<50000 mPa.s
VOC content:	Not available.

## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

No specific test data related to reactivity available for this product or its ingredients.

### 10.2 Chemical stability

Stable under the conditions recommended of storage.

### 10.3 Possibility of dangerous reactions

Stable under normal handling and storage conditions.

### 10.4 Conditions to avoid

Avoid excessive heat for prolonged periods of time.

### 10.5 Incompatible matters

Oxidizing agents, strong acids.

### 10.6 Products of dangerous decomposition

Oxides of the following substances: carbon

## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on the toxicological effects

#### Acute toxicity:

Product/ingredient name	Result	Species	Dose	Exposure
2-butoxyethanol	LD50 Oral	Rat	1300 mg/kg	-
	ATE Inhalation Vapour	Rat	11 mg/l	-
	ATE Inhalation Gases	Rat	4500 ppm	-
	LD50 Dermal	Rat	1100 mg/kg	-

**Local effects (serious Corrosion/Irritation/ eye damage):**

Contact with skin: Animal data: No information available.

Contact with the eyes: No information available.

**Respiratory or skin sensitizing:**

Inhalation: No data available.

Contact with skin: No data available.

**Effects CMR:** No information available.**Specific toxicity for certain target bodies:**

Single exposure: No data available.

Repeated exposure: No data available.

**Danger by aspiration:****Aspiration hazard** No information available.**Inhalation** Harmful by inhalation.**Ingestion** Harmful if swallowed.**Skin contact** Harmful in contact with skin. Irritating to skin.**Eye contact** Irritating to eyes.**Acute and chronic health Hazards** A single exposure may cause the following adverse effects: Central nervous system depression.**Target organs** Skin Eyes Respiratory system, lungs.**12. ECOLOGICAL INFORMATION****12.1 Toxicity**

Product/ingredient name	Result	Species	Exposure
2-butoxyethanol	NOEC 100 mg/l	Daphnia	21 days
	NOEC >100 mg/l	Fish	21 days
	Acute EC50 1840 mg/l	Algae	72 hours
	Acute EC50 1550 mg/l	Daphnia	48 hours
	Acute LC50 800000 µg/l Marine water	Crustaceans - Crangon crangon	48 hours
	Acute LC50 1474 mg/l Fish	Fish	96 hours
	Acute LC50 1490 mg/l Fresh water Fish	Lepomis macrochirus	96 hours
	Acute LC50 1250000 µg/l Marine water Fish	Fish- Menidia beryllina	96 hours
	Acute NOEC 88 mg/l	Algae	72 hours

**12.2 Persistence and degradability**

Product/ingredient name	Test	Result	Dose	Inoculum
2-butoxyethanol	OECD 301B Ready Biodegradability-CO2 Evolution Test`	90% - 28 days	-	-

Product/ingredient name	Aquatic half -life	Photolysis	Biodegradability
2-butoxyethanol	-	-	Readily

**12.3 Potential of bioaccumulation**

Product/ingredient name	LogPow	BCF	Potential
2-butoxyethanol	0,8	-	Low

**12.4 Mobility in soil**

Soil/water partition coefficient (Koc): Not available

**12.5 Other adverse effects:**

No known significant effects or critical hazards.

## 13. DISPOSAL CONSIDERATIONS

### Disposal Methods

#### Type of waste Regulation (EU) N°1357/2014

HP4- Skin irritation and eye damage

**Methods of disposal** : Must not be disposed together with household garbage. Do not allow product to reach sewage system. Do not puncture or incinerate, even when empty. Waste is classified as hazardous waste.

#### Packaging

**Methods of disposal** : Disposal must be made according to official regulation (EC) N°1907/2006 (REACH).

## 14. INFORMATION RELATING TO TRANSPORT

The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

**Special precautions for user**: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code** : Not available.

## 15. REGULATORY INFORMATION

### 15.1 Safety, health and environment regulations/legislation specific to the substance/ mixture

EU Regulation (EC) No. 1907/2006 (REACH) .

EU Regulation (EC) N°. 1272/2008 (CLP os substances and mixtures).

China inventory (IECSC) : Not determined.

#### Inventory of hazardous Chemicals

Product/ingredient name	CAS number	Status
2-butoxyethanol	111-76-2	Listed

#### **List of toxic chemicals severely restricted for importing & exporting by China :**

None of the componenets are listed.

#### **International Regulations**

##### **Chemicals Weapon Convention List Schedules I, II and III Chemicals**

Ingredient name	List name	Status
Not listed		

##### **Montreal Protocol (Annexes A, B, C, E)**

Ingredient name	List name	Status
Not listed		

## Stockholm Convention on persistent Organic Pollutants

Ingredient name Not listed	List name	Status
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## Rotterdam Convention on Prior Inform Consent (PIC)

Ingredient name Not listed	List name	Status
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## UNECE Aarhus Protocol on POPs and Heavy Metals

Ingredient name Not listed	List name	Status
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**15.2 Chemical safety assessment** : No Chemical Safety Assessment has been carried out

## 16. OTHER INFORMATION

### Procedure used to derive the classification according to Regulation (EC) N°. 1272/2008 (CLP/GHS)

Classification	Justification
Acute Tox. 4, H302	Calculation method
Acute Tox. 4, H312	Calculation method
Acute Tox 4, H332	Calculation method
Skin Irrit. 2, H315	Calculation method
Eye Irrit. 2, H319	Calculation method

**Full Text of abbreviated H statements** :

H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.

**Alterations compared to the previous version** : Not applicable

**Abbreviations and acronyms**

- : ATE= Acute Toxicity Estimate
- : CLP= Classification, Labelling and Packaging Regulation (EC N°. 1272/2008)
- : DMEL= Derived Minimal Effect Level
- : DNEL= Derived No Effect Level
- : EUH statement= CLP- specific Hazard Statement
- : PBT= Persistent, Bioaccumulative and Toxic
- : PNEC= Predicted No Effect Concentration
- : RRN= Reach Registration Number
- : vPvB= Very Persistent and Very Bioaccumulative

**Sources of key data** : Literature data

**Additional information provided by:** ECOAT SAS Telephone +33 (0) 4 93 40 74 54 - Telefax +33 (0) 9 71 70 58 32

### History

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