According to Regulation (EG) 1907/2006 (REACH)

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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Mixture identification:

Trade name: Epson T0481 Black

Trade code: K12013W4

- 1.2. Relevant identified uses of the substance or mixture and uses advised against
- 1.3. Details of the supplier of the safety data sheet

Supplier:

Armor S.A.S

CS 90508, 44105 Nantes Cedex 4, France

Tel.: +33 (0) 240384000 Fax: +33 (0) 240384001 sds.de@armor-group.com http://www.armor-group.com

1.4. Emergency telephone number

+33 (0)240384000

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP)

The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).

Hazard pictograms:

None

Hazard statements:

None

Precautionary statements:

None

Special Provisions:

None

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

2.3. Other hazards

vPvB Substances: None - PBT Substances: None

Other Hazards:

No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification:

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·				
>= 7% -	2-(2-butoxyethoxy)etha	Index	603-096-00-8	3.3/2 Eye Irrit. 2 H319
< 10%	nol; diethylene glycol	number:		0.0/2 Lyc IIII. 2 110 10
	monobutyl ether	CAS:	112-34-5	
		EC:	203-961-6	
>= 7% -	2,2' -oxybisethanol;	Index	603-140-00-6	3.1/4/Oral Acute Tox. 4 H302
< 10%	diethylene glycol	number:		3.1/4/Oral Acute 10x. 4 11302
		CAS:	111-46-6	
		EC:	203-872-2	

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Wash with plenty of water and soap.

In case of eyes contact:

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

In case of Ingestion:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

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

None

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

Treatment:

None

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO2).

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

5.3. Advice for firefighters

Use suitable breathing apparatus.

Collect contaminated fire extinguishing water separately. This must not be discharged into

Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove persons to safety.

See protective measures under point 7 and 8.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

6.3. Methods and material for containment and cleaning up

Wash with plenty of water.

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6.4. Reference to other sections See also section 8 and 13



SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhaltion of vapours and mists.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

7.3. Specific end use(s)

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether - CAS: 112-34-5

- OEL Type: EU - TWA(8h): 67.5 mg/m3, 10 ppm - STEL: 101.2 mg/m3, 15 ppm

- OEL Type: ACGIH - TWA(8h): 10 ppm - Notes: (IFV) - Hematologic, liver and kidney eff

DNEL Exposure Limit Values

N.A.

PNEC Exposure Limit Values

N.A.

8.2. Exposure controls

Eye protection:

Not needed for normal use. Anyway, operate according good working practices.

Protection for skin:

No special precaution must be adopted for normal use.

Protection for hands:

Not needed for normal use.

Respiratory protection:

Not needed for normal use.

Thermal Hazards:

None

Environmental exposure controls:

None

Appropriate engineering controls:

None

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes
Appearance:	black		
Colour:	black.jpg		
Odour:	N.A.		
Odour threshold:	N.A.		
pH:	7-9		
Melting point / freezing	N.A.		
point:			
Initial boiling point and	N.A.		
boiling range:			

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Flash point:	>93.3 ° C	EN ISO 2719	
Evaporation rate:	N.A.		
Solid/gas flammability:	N.A.		
Upper/lower flammability	N.A.		
or explosive limits:			
Vapour pressure:	N.A.		
Vapour density:	N.A.		
Relative density:	>1		
Solubility in water:	soluble		
Solubility in oil:	N.A.		
Partition coefficient	N.A.		
(n-octanol/water):			
Auto-ignition temperature:	N.A.		
Decomposition	N.A.		
temperature:			
Viscosity:	>1		
Explosive properties:	N.A.		
Oxidizing properties:	N.A.		

9.2. Other information

Properties	Value	Method:	Notes
Miscibility:	N.A.		
Fat Solubility:	N.A.		
Conductivity:	N.A.		
Substance Groups	N.A.		
relevant properties			

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions

10.2. Chemical stability

Stable under normal conditions

10.3. Possibility of hazardous reactions
None

10.4. Conditions to avoid

Stable under normal conditions.

10.5. Incompatible materials

None in particular.

10.6. Hazardous decomposition products None.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological information of the product:

N.A.

Toxicological information of the main substances found in the product:

N.A.

If not differently specified, the information required in Regulation (EU)2015/830 listed below must be considered as N.A.:

- a) acute toxicity;
- b) skin corrosion/irritation;
- c) serious eye damage/irritation;
- d) respiratory or skin sensitisation;
- e) germ cell mutagenicity;

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- f) carcinogenicity;
- g) reproductive toxicity;
- h) STOT-single exposure;
- i) STOT-repeated exposure;
- i) aspiration hazard.

SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

N.A.

12.2. Persistence and degradability

N.A

12.3. Bioaccumulative potential

N.A.

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

12.6. Other adverse effects

None

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover if possible. In so doing, comply with the local and national regulations currently in force.

SECTION 14: Transport information

14.1. UN number

Not classified as dangerous in the meaning of transport regulations.

14.2. UN proper shipping name

N.A.

14.3. Transport hazard class(es)

N.A.

14.4. Packing group

N.A.

14.5. Environmental hazards

ADR-Enviromental Pollutant: No IMDG-Marine pollutant: No

14.6. Special precautions for user

N.A.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

N.A

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)

Regulation (EC) n. 1907/2006 (REACH)

Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013

Regulation (EG) 1907/2006 (REACH)

Regulation (EU) n. 286/2011 (ATP 2 CLP)



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Regulation (EU) n. 618/2012 (ATP 3 CLP) Regulation (EU) n. 487/2013 (ATP 4 CLP) Regulation (EU) n. 944/2013 (ATP 5 CLP) Regulation (EU) n. 605/2014 (ATP 6 CLP) Regulation (EU) n. 2015/1221 (ATP 7 CLP) Regulation (EU) n. 2016/918 (ATP 8 CLP) Regulation (EU) n. 2016/1179 (ATP 9 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product:

No restriction.

Restrictions related to the substances contained:

Restriction 55

Where applicable, refer to the following regulatory provisions:

Directive 2012/18/EU (Seveso III)

Regulation (EC) nr 648/2004 (detergents).

Dir. 2004/42/EC (VOC directive)

Dir. 2004/42/EC (VOC directive)

WGK Classification (Water hazard class - Verwaltungsvorschrift wassergefĤhrdende Stoffe)

Provisions related to directive EU 2012/18 (Seveso III):

Seveso III category according to Annex 1, part 1

Product belongs to	Lower-tier	Upper-tier
category:	threshold (tonnes)	threshold (tonnes)
None		

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

SECTION 16: Other information

Full text of phrases referred to in Section 3:

H319 Causes serious eye irritation.

H302 Harmful if swallowed.

Hazard class and hazard category	Code	Description
Acute Tox. 4	3.1/4/Oral	Acute toxicity (oral), Category 4
Eye Irrit. 2	3.3/2	Eye irritation, Category 2

This safety data sheet has been completely updated in compliance to Regulation 2015/830.

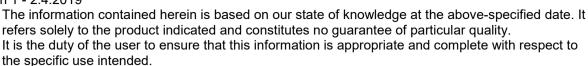
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ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

According to Regulation (EG) 1907/2006 (REACH)
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This Safety Data Sheet is only for the Armor product mentioned after " Product name : " in SECTION 1 - All use for other products is strictly forbidden.

This MSDS cancels and replaces any preceding release.

ADR: European Agreement concerning the International Carriage of

Dangerous Goods by Road.

CAS: Chemical Abstracts Service (division of the American Chemical

Society).

CLP: Classification, Labeling, Packaging.

DNEL: Derived No Effect Level.

EINECS: European Inventory of Existing Commercial Chemical Substances.

GefStoffVO: Ordinance on Hazardous Substances, Germany.

GHS: Globally Harmonized System of Classification and Labeling of

Chemicals.

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport

Association" (IATA).

ICAO: International Civil Aviation Organization.

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization"

(ICAO).

IMDG: International Maritime Code for Dangerous Goods. INCI: International Nomenclature of Cosmetic Ingredients.

KSt: Explosion coefficient.

LC50: Lethal concentration, for 50 percent of test population.

LD50: Lethal dose, for 50 percent of test population.

PNEC: Predicted No Effect Concentration.

RID: Regulation Concerning the International Transport of Dangerous Goods

by Rail.

STEL: Short Term Exposure limit.
STOT: Specific Target Organ Toxicity.
TLV: Threshold Limiting Value.
TWA: Time-weighted average
WGK: German Water Hazard Class.