

This safety data sheet was created pursuant to the requirements of:
UK REACH Regulations (SI 2019/758 as amended)

Supersedes date 21-Jan-2020

Revision date 19-Sep-2023

Revision Number 4

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

1.1. Product identifier

Product Code(s) 663
Safety data sheet number 663
Product Name 2-BUTOXYETHYL ACETATE
EC No (EU Index No) 203-933-3
(607-038-00-2)
CAS No 112-07-2
Synonyms BUTYL GLYCOL ACETATE, BGA, MX ACRYL D THINNER RM0016, EGBEA
Pure substance/mixture Substance

Contains 2-BUTOXYETHYL ACETATE

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

Recommended use Solvent Additive PRINTING INK

1.3. Details of the supplier of the safety data sheet

Supplier

Univar Solutions UK Ltd
Aquarius House
6 Mid Point Business Park
Bradford
GBR

For further information, please contact

E-mail address SDS.EMEA@univarsolutions.com
Non-Emergency Telephone Number +44 1274 267300 / +44 1274 267306

1.4. Emergency telephone number

Emergency Telephone SGS - +32 (0)3 575 55 55 (24h)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Acute toxicity - Oral	Category 4 - (H302)
Acute toxicity - Dermal	Category 4 - (H312)
Acute toxicity - Inhalation (Vapours)	Category 4 - (H332)

2.2. Label elements

Contains 2-BUTOXYETHYL ACETATE

**Signal word**

Warning

Hazard statements

H302 - Harmful if swallowed

H312 - Harmful in contact with skin

H332 - Harmful if inhaled

Precautionary statements

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

P264 - Wash face, hands and any exposed skin thoroughly after handling

P280 - Wear protective gloves and protective clothing

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

P321 - Specific treatment (see supplemental first aid instructions on this label)

P501 - Dispose of contents/ container to an approved waste disposal plant

Additional information

This product requires tactile warnings if supplied to the general public.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.1 Substances

Chemical name	Weight-%	EC No (EU Index No)	UK REACH registration number	Classification according to GB CLP (SI 2020/1567 as amended)	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)
2-BUTOXYETHYL ACETATE 112-07-2	90 - 100%	203-933-3 (607-038-00-2)	-	Acute Tox. 4 (H312) Acute Tox. 4 (H332) Acute Tox. 4 (H302)	-	-	-

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

This product does not contain candidate substances of very high concern at a concentration $\geq 0.1\%$ (UK REACH Article 59)

SECTION 4: First aid measures**4.1. Description of first aid measures**

Inhalation	Remove to fresh air. Get medical attention immediately if symptoms occur.
Eye contact	Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical attention.
Skin contact	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Get medical attention immediately if symptoms occur.
Ingestion	Clean mouth with water and drink afterwards plenty of water. Get medical attention.

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

Inhalation	Harmful if inhaled.
Dermal	Harmful in contact with skin.
Ingestion	Harmful if swallowed

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

Note to doctors	Treat symptomatically.
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SECTION 5: Firefighting measures**5.1. Extinguishing media**

Suitable Extinguishing Media	Dry chemical, CO2, alcohol-resistant foam or water spray.
Large Fire	CAUTION: Use of water spray when fighting fire may be inefficient.
Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products	Carbon oxides.
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5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.
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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 Collect with absorbent, non-combustible material into suitable containers. Flush area with flooding quantities of water. Collect spillage in containers, seal securely and deliver for disposal according to local regulations.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

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 container tightly closed in a dry and well-ventilated place.

7.3. Specific end use(s)

Specific use(s)
See section 1 for more information.

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits

Chemical name	United Kingdom
2-BUTOXYETHYL ACETATE 112-07-2	TWA: 20 ppm TWA: 133 mg/m ³ STEL: 50 ppm STEL: 332 mg/m ³ Sk*

Biological occupational exposure limits This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

Derived No Effect Level (DNEL) - Workers

Chemical name	Oral	Dermal	Inhalation
2-BUTOXYETHYL ACETATE 112-07-2		102 mg/kg [4] [6]	133 mg/m ³ [4] [6]

[4] Systemic health effects.
[6] Long term.

Derived No Effect Level (DNEL) - General Public

Chemical name	Oral	Dermal	Inhalation
2-BUTOXYETHYL ACETATE 112-07-2	4.3 mg/kg [4] [6]	36 mg/kg [4] [6]	67 mg/m ³ [4] [6]

[4] Systemic health effects.
[6] Long term.

Predicted No Effect Concentration (PNEC)

Chemical name	Freshwater	Freshwater (intermittent release)	Marine water	Marine water (intermittent release)	Air
2-BUTOXYETHYL ACETATE 112-07-2	0.304 mg/l	0.56 mg/L	0.0304 mg/l		

Chemical name	Freshwater sediment	Marine sediment	Sewage treatment	Soil	Food chain
2-BUTOXYETHYL ACETATE 112-07-2	2.03 mg/kg	0.203 mg/kg	90 mg/L	0.42 mg/kg	90 mg/l

8.2. Exposure controls

Engineering controls No information available.

Personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles). Wear safety glasses with side shields (or goggles). Use eye protection according to EN 166.

Hand protection Wear suitable gloves. Ensure that the breakthrough time of the glove material is not exceeded. Refer to glove supplier for information on breakthrough time for specific gloves. Gloves must conform to standard EN 374. Protective gloves.

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

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Liquid
Colour	Colourless
Odour	Mild.
Odour threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
Melting point / freezing point	-64 °C	
Initial boiling point and boiling range	192.2 °C	
Flammability		No information available
Flammability Limit in Air		No information available
Upper flammability or explosive limits		
Lower flammability or explosive limits		
Flash point	71 °C	Tag Closed Cup
Autoignition temperature	> 280 °C	
Decomposition temperature		No information available
pH		No information available
pH (as aqueous solution)	4.0	solution (1.0 %)
Kinematic viscosity		No information available
Dynamic viscosity	1.8 mPa s	@ 20 °C
Water solubility	slightly soluble	
Solubility(ies)		No information available
Partition coefficient	log Pow: 1.51	
Vapour pressure	0.5 hPa	@ 20 °C
Relative density	0.942	20 °C
Bulk density		
No information available		Relative vapour density > 1
		Particle characteristics
		Particle Size
		Particle Size
		Distribution
Explosive properties	Not considered to be explosive	
Oxidising properties	Does not meet the criteria for classification as oxidising	

9.2. Other information

Refractive Index	1.413-1.415
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SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	Stable under recommended storage conditions.
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10.2. Chemical stability

Stability	Stable under normal conditions.
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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

Conditions to avoid Extremes of temperature and direct sunlight.

10.5. Incompatible materials

Incompatible materials Strong oxidising agents.

10.6. Hazardous decomposition products

Hazardous decomposition products Carbon oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Information on likely routes of exposure

Product Information

Inhalation	Harmful if inhaled.
Eye contact	May cause slight eye irritation.
Skin contact	Harmful in contact with skin.
Ingestion	Harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available.

Acute toxicity

Numerical measures of toxicity

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
2-BUTOXYETHYL ACETATE	= 2400 mg/kg (Rat)	= 1500 mg/kg (Rabbit)	> 400 ppm (Rat) 4 h

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 sensitisation 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.

Other adverse effects No information available.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity Not considered to be harmful to aquatic life.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
2-BUTOXYETHYL ACETATE	EC50: >500mg/L (72h, <i>Desmodesmus subspicatus</i>)	LC50: 20 - 40mg/L (96h, <i>Oncorhynchus mykiss</i>)	-	EC50: =37mg/L (48h, <i>Daphnia magna</i>)

12.2. Persistence and degradability

Persistence and degradability Readily biodegradable.

Method	Exposure time	Value	Results
	28 days	88% Biodegradation	Readily biodegradable

12.3. Bioaccumulative potential

Bioaccumulation No information available.

Component Information

Chemical name	Partition coefficient
2-BUTOXYETHYL ACETATE	1.51

12.4. Mobility in soil

Mobility in soil slightly soluble.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment The product does not contain any substance(s) classified as PBT or vPvB.

Chemical name	PBT and vPvB assessment
2-BUTOXYETHYL ACETATE	The substance is not PBT / vPvB

12.6. 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	Do not reuse empty containers.

SECTION 14: Transport information**IATA**

14.1 UN number or ID number	Not regulated
14.2 UN proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	
Special Provisions	None

IMDG

14.1 UN number or ID number	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	
Special Provisions	None
14.7 Maritime transport in bulk according to IMO instruments	No information available

RID

14.1 UN number or ID number	Not regulated
14.2 UN proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	
Special Provisions	None

ADR

14.1 UN number or ID number	Not regulated
14.2 UN proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	
Special Provisions	None

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

National regulations**Authorisations and/or restrictions on use:**

This product does not contain substances subject to authorisation (UK REACH - Annex XIV).
This product does not contain substances subject to restriction (UK REACH - Annex XVII).

Persistent Organic Pollutants

Not applicable

Export Notification requirements

Not applicable

Named dangerous substances per COMAH Regulations 2015 (as amended)

Not applicable

The Ozone-Depleting Substances Regulations 2015

Not applicable

The Biocidal Products Regulations 2001 (as amended)

Not applicable

The Water Environment (Water Framework Directive) (England and Wales) Regulations 2017 (as amended)

Not applicable

Poisons Act 1972 (Explosive Precursors) Regulations (as Amended)

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
AIIC	Contact supplier for inventory compliance status
NZIoC	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
AIIC - Australian Inventory of Industrial Chemicals
NZIoC - New Zealand Inventory of Chemicals

15.2. Chemical safety assessment

Chemical Safety Report A Chemical Safety Assessment has been carried out for this substance

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 section 3

H302 - Harmful if swallowed

H312 - Harmful in contact with skin

H332 - Harmful if inhaled

Legend

SVHC: Substances of Very High Concern for Authorisation:

Legend Section 8: Exposure controls/personal protection

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation
+	Sensitisers		

Revision Note ***Indicates updated data since last publication

Classification procedure

Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used
Acute oral toxicity	Calculation method
Acute dermal toxicity	Calculation method
Acute inhalation toxicity - gas	Calculation method
Acute inhalation toxicity - vapour	Calculation method
Acute inhalation toxicity - dust/mist	Calculation method
Skin corrosion/irritation	Calculation method
Serious eye damage/eye irritation	Calculation method
Respiratory sensitisation	Calculation method
Skin sensitisation	Calculation method
Mutagenicity	Calculation method
Carcinogenicity	Calculation method
Reproductive toxicity	Calculation method
STOT - single exposure	Calculation method
STOT - repeated exposure	Calculation method
Acute aquatic toxicity	Calculation method
Chronic aquatic toxicity	Calculation method
Aspiration hazard	Calculation method
Ozone	Calculation method

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)
 U.S. Environmental Protection Agency ChemView Database
 European Food Safety Authority (EFSA)
 European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA_RAC)
 European Chemicals Agency (ECHA) (ECHA_API)
 EPA (Environmental Protection Agency)
 Acute Exposure Guideline Level(s) (AELG(s))
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
 U.S. Environmental Protection Agency High Production Volume Chemicals
 Food Research Journal
 Hazardous Substance Database
 International Uniform Chemical Information Database (IUCLID)
 National Institute of Technology and Evaluation (NITE)
 Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
 NIOSH (National Institute for Occupational Safety and Health)
 National Library of Medicine's ChemID Plus (NLM CIP)
 National Library of Medicine's PubMed database (NLM PUBMED)
 National Toxicology Program (NTP)
 New Zealand's Chemical Classification and Information Database (CCID)
 Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications
 Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme
 Organisation for Economic Co-operation and Development Screening Information Data Set
 World Health Organization

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This material safety data sheet complies with the requirements of UK REACH Regulations (SI 2019/758 as amended)
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

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.

End of Safety Data Sheet