

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Date of issue: 28.03.2018 Revision date: 22.09.2023 Supersedes version of: 28.03.2018 Version: 1.1

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

1.1. Product identifier

Product form : Mixture Name : Reagent EDTA Trade name : Reagent EDTA : PRLR-RED Product code

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

1.2.1. Relevant identified uses

Main use category : Reagent for water analysis

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

labbox labware s.l. Migjorn, 1

P.O. Box Barcelona (SPAIN) 08338 Premia de Dalt - SPAIN

ES

T +34 937 07 79 70 - F +34 937 909 532 info@labbox.com - www.labbox.com

1.4. Emergency telephone number

Emergency number

: +34 937 077 970 (For technical information_Office Hours) In case of medical emergency phone 112 or to your local emergency number.

Country	Organisation/Company	Address	Emergency number	Comment
United Kingdom	National Poisons Information Service (Belfast Centre) Royal Victoria Hospital	Grosvenor Road BT12 6BA	0344 892 0111	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute toxicity (dermal), Category 4 H312 Acute toxicity (inhal.), Category 1 H330

Full text of H and EUH statements: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



GHS06

Signal word (CLP) : Danger

Contains : SODIUM BORATE; Boric acid EPR

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Hazard statements (CLP) : H312 - Harmful in contact with skin.

H330 - Fatal if inhaled.

Precautionary statements (CLP) : P260 - Do not breathe dust/fume/gas/mist/vapours/spray.

P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position

comfortable for breathing.

P310 - Immediately call a POISON CENTER or doctor/physician.

P321 - Specific treatment (see supplemental first aid instruction on this label). P403+P233 - Store in a well-ventilated place. Keep container tightly closed.

2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

Component	
SODIUM BORATE (1330-43-4)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
Boric acid EPR (10043-35-3)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605

Component	pmponent		
SODIUM BORATE(1330-43-4)	The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605		
Boric acid EPR(10043-35-3)	The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605		

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
SODIUM BORATE substance listed as REACH Candidate (Disodium tetraborate, anhydrous)	CAS-No.: 1330-43-4 EC-No.: 215-540-4	< 4	Eye Irrit. 2, H319 Repr. 1B, H360D
Boric acid EPR substance listed as REACH Candidate	CAS-No.: 10043-35-3 EC-No.: 233-139-2 EC Index-No.: 005-007-00-2	< 2	Repr. 1B, H360FD

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Specific concentration limits:		
Name	Product identifier	Specific concentration limits (%)
Boric acid EPR	CAS-No.: 10043-35-3 EC-No.: 233-139-2 EC Index-No.: 005-007-00-2	(5,5 ≤ C < 100) Repr. 1B, H360FD

Full text of H and EUH statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : If you feel unwell, seek medical advice (show the label where possible). Seek medical

attention immediately.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Give oxygen or artificial

respiration if necessary. Call a physician immediately.

First-aid measures after skin contact : Gently wash with plenty of soap and water. If skin irritation occurs: Get medical

advice/attention.

First-aid measures after eye contact : Immediately rinse with water for a prolonged period while holding the eyelids wide open.

Get medical advice/attention.

First-aid measures after ingestion : Do not induce vomiting. Rinse mouth out with water. Give water to drink. Call a physician

immediately.

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

Symptoms/effects after inhalation : Cough.

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

Never give anything by mouth to an unconscious person.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Making extinguishing agents environment-friendly.

Unsuitable extinguishing media : Strong water jet.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

Firefighting instructions : Exercise caution when fighting any chemical fire.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Evacuate area. Avoid contact with skin and eyes.

6.1.1. For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Prevent entry to sewers and public waters.

22.09.2023 (Revision date) EN (English) 3/12

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.

Methods for cleaning up : Clean contaminated surfaces with an excess of water.

6.4. Reference to other sections

See Heading 8. For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station.

Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or

smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

smoking. Store in a well-ventilated place. Keep container tightly closed.

Storage area : Store in a well-ventilated place.

Special rules on packaging : Keep only in original container. Store in a closed container.

7.3. Specific end use(s)

Reagent for water analysis.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

Reagent EDTA	
Belgium - Occupational Exposure Limits	
OEL TWA	2 mg/m³
OEL STEL	6 mg/m³
Bulgaria - Occupational Exposure Limits	
OEL TWA	5 mg/m³
Croatia - Occupational Exposure Limits	
GVI (OEL TWA) [1]	1 mg/m³
Denmark - Occupational Exposure Limits	
OEL TWA [1]	1 mg/m³
France - Occupational Exposure Limits	
VME (OEL TWA)	1 mg/m³
Greece - Occupational Exposure Limits	
OEL TWA	10 mg/m³
Ireland - Occupational Exposure Limits	
OEL TWA [1]	1 mg/m³
OEL STEL	6 mg/m³
Italy - Occupational Exposure Limits	
OEL TWA	2 mg/m³

22.09.2023 (Revision date) EN (English) 4/12

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Reagent EDTA		
OEL STEL	6 mg/m³	
Portugal - Occupational Exposure Limits		
OEL TWA	2 mg/m³	
OEL STEL	6 mg/m³	
Spain - Occupational Exposure Limits		
VLA-ED (OEL TWA) [1]	2 mg/m³	
VLA-EC (OEL STEL)	6 mg/m³	
SODIUM BORATE (1330-43-4)		
France - Occupational Exposure Limits		
Local name	Sodium (tétraborate de, anhydre) (Borax)	
VME (OEL TWA)	1 mg/m³	
Remark	Valeurs recommandées/admises; substance classée toxique pour la reproduction de catégorie 1B	
Regulatory reference	Circulaire du Ministère du travail (réf.: INRS ED 984, 2016)	
Portugal - Occupational Exposure Limits		
Local name	Boratos, compostos inorgânicos	
OEL TWA	2 mg/m³ I (Fraçao inalável)	
OEL STEL	6 mg/m³ I (Fraçao inalável)	
Regulatory reference	Norma Portuguesa NP 1796:2014	
Spain - Occupational Exposure Limits		
Local name	Borato de sodio, anhidro (Tetraborato de sodio, anhidro)	
VLA-ED (OEL TWA) [1]	2 mg/m³	
VLA-EC (OEL STEL)	6 mg/m³	
Remark	TR1B (Cuando las pruebas utilizadas para la clasificación procedan principalmente de datos en animales), r (Esta sustancia tiene establecidas restricciones a la fabricación, la comercialización o el uso en los términos especificados en el "Reglamento (CE) nº 1907/2006 sobre Registro, Evaluación, Autorización y Restricción de sustancias y preparados químicos" (REACH) de 18 de diciembre de 2006 (DOUE L 369 de 30 de diciembre de 2006). Las restricciones de una sustancia pueden aplicarse a todos los usos o sólo a usos concretos. El anexo XVII del Reglamento REACH contiene la lista de todas las sustancias restringidas y especifica los usos que se han restringido).	
Regulatory reference	Límites de Exposición Profesional para Agentes Químicos en España 2019. INSHT	
United Kingdom - Occupational Exposure Limits		
Local name	Disodium tetraborate, anhydrous	
WEL TWA [1]	1 mg/m³	
Regulatory reference	EH40/2005 (Third edition, 2018). HSE	
Boric acid EPR (10043-35-3)		
Germany - Occupational Exposure Limits (TRGS 900)		
Local name	Borsäure und Natriumborate	
AGW (OEL TWA) [1]	0,5 mg/m³ E (mg/m3)	
Remark	AGS,Y,10	

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Boric acid EPR (10043-35-3)	
Portugal - Occupational Exposure Limits	
Local name	Boratos, compostos inorgânicos
OEL TWA	2 mg/m³ I (Fraçao inalável)
OEL STEL	6 mg/m³ I (Fraçao inalável)
Spain - Occupational Exposure Limits	
Local name	Ácido bórico
VLA-ED (OEL TWA) [1]	2 mg/m³
VLA-EC (OEL STEL)	6 mg/m³
Remark	TR1B (Cuando las pruebas utilizadas para la clasificación procedan principalmente de datos en animales), s (Esta sustancia tiene prohibida total o parcialmente su comercialización y uso como fitosanitario y/o como biocida. Para una información detallada acerca de las prohibiciones consúltese: Base de datos de productos biocidas: http://www.msssi.gob.es/ciudadanos/productos.do?tipo=plaguicidas Base de datos de productos fitosanitarios http://www.magrama.gob.es/agricultura/pags/fitos/registro/fichas/pdf/Lista_sa.pdf).

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

8.2.2. Personal protection equipment

Personal protective equipment:

Avoid all unnecessary exposure. EN 374.

Personal protective equipment symbol(s):







8.2.2.1. Eye and face protection

Eye protection:

Wear closed safety glasses

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Hand protection:

protective gloves

8.2.2.3. Respiratory protection

Respiratory protection:

In case of inadequate ventilation wear respiratory protection.

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Other information:

Wash hands with water as a precaution. Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid Colour white. Odour odourless. Odour threshold : Not available : Not available Melting point : Not available Freezing point : Not available Boiling point Flammability : Not available Lower explosion limit : Not applicable Upper explosion limit : Not applicable Flash point : Not applicable Auto-ignition temperature : Not applicable Decomposition temperature : Not available

pH : 8,5

pH solution : Not available Viscosity, kinematic : Not applicable Solubility : Not available Partition coefficient n-octanol/water (Log Kow) : Not available Vapour pressure : Not available : Not available Vapour pressure at 50 °C : Not available Density : Not available Relative density Relative vapour density at 20 °C : Not applicable Particle size : Not available

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable under recommended handling and storage conditions (see section 7).

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

Heat.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

No additional information available

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral) : Not classified

Acute toxicity (dermal) : Harmful in contact with skin.

Acute toxicity (inhalation) : Fatal if inhaled.

Reagent EDTA		
LD50 oral rat	2660 mg/kg	
LD50 dermal rat	> 2000	
LC50 inhalation rat (mg/l)	> 2 mg/l	
ATE CLP (vapours)	0,05 mg/l/4h	
ATE CLP (dust,mist)	0,005 mg/l/4h	

oric acid EPR (10043-35-3)		
LD50 oral rat	> 2600 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 401 (Acute Oral Toxicity), Guideline: EU Method B.1 (Acute Toxicity (Oral))	
LD50 dermal rabbit	> 2000 mg/kg bodyweight Animal: rabbit, Guideline: other:FIFRA (40 CFR 163)	
LC50 inhalation rat (mg/l)	> 2,12 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity),	

Skin corrosion/irritation : Not classified pH: 8,5

Boric acid EPR (10043-35-3)	R (10043-35-3)	
рН	5,1 (15 20° C)	
'	5,1 (15 20° C)	

Serious eye damage/irritation : Not classified pH: 8,5

Boric acid EPR (10043-35-3)	acid EPR (10043-35-3)	
рН	5,1 (15 20° C)	

Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
STOT-single exposure : Not classified
STOT-repeated exposure : Not classified
Aspiration hazard : Not classified

22.09.2023 (Revision date) EN (English) 8/12

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Adverse health effects caused by endocrine

: Not applicable

disrupting properties

11.2.2. Other information

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term

: Not classified

(acute)

Hazardous to the aquatic environment, long-term

: Not classified

(chronic)

(6.11.6.11.6)		
Reagent EDTA		
LC50 - Fish [1]	340 mg/l	
EC50 - Daphnia [1]	1085 – 1402	
EC50 72h - Algae [1]	158 mg/l	
Boric acid EPR (10043-35-3)		
LC50 - Fish [1]	79,7 mg/l Test organisms (species): Pimephales promelas	
LC50 - Fish [2]	74 mg/l Test organisms (species): Limanda limanda	
EC50 72h - Algae [1]	66 mg/l Test organisms (species): Phaeodactylum tricornutum	
EC50 72h - Algae [2]	54 mg/l Test organisms (species): Phaeodactylum tricornutum	
NOEC chronic fish	6,4 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio) Duration: '34 d'	

12.2. Persistence and degradability

Reagent EDTA	
Persistence and degradability	Product is biodegradable.

12.3. Bioaccumulative potential

Boric acid EPR (10043-35-3)	
Partition coefficient n-octanol/water (Log Pow)	-0,757

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

Reagent EDTA

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

22.09.2023 (Revision date) EN (English) 9/12

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Component	
SODIUM BORATE (1330-43-4)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
Boric acid EPR (10043-35-3)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Endocrine disrupting properties

Adverse effects on the environment caused by endocrine disrupting properties

: Not applicable.

12.7. Other adverse effects

Other adverse effects : Do not discharge into drains or rivers.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste) : Disposal must be done according to official regulations.

Waste treatment methods : Must follow special treatment according to local regulation.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

14.1. UN number or ID number

Not regulated for transport

14.2. UN proper shipping name

Proper Shipping Name (ADR) : Not regulated Proper Shipping Name (IMDG) : Not regulated Proper Shipping Name (IATA) : Not regulated Proper Shipping Name (ADN) : Not regulated Proper Shipping Name (RID) : Not regulated

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : Not regulated

IMDG

Transport hazard class(es) (IMDG) : Not regulated

IATA

Transport hazard class(es) (IATA) : Not regulated

ADN

Transport hazard class(es) (ADN) : Not regulated

RID

Transport hazard class(es) (RID) : Not regulated

14.4. Packing group

Packing group (ADR) : Not regulated Packing group (IMDG) : Not regulated Packing group (IATA) : Not regulated Packing group (ADN) : Not regulated Packing group (RID) : Not regulated

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

14.5. Environmental hazards

Other information : No supplementary information available

14.6. Special precautions for user

Overland transport

Not regulated

Transport by sea

Not regulated

Air transport

Not regulated

Inland waterway transport

Not regulated

Rail transport

Not regulated

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

Contains no REACH substances with Annex XVII restrictions

REACH Annex XIV (Authorisation List)

Contains no REACH Annex XIV substances

REACH Candidate List (SVHC)

Contains a substance on the REACH candidate list in concentration ≥ 0.1% or with a lower specific limit: Disodium tetraborate, anhydrous (EC 215-540-4, CAS 1330-43-4), Boric acid (EC 233-139-2, CAS 10043-35-3)

PIC Regulation (Prior Informed Consent)

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

POP Regulation (Persistent Organic Pollutants)

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Ozone Regulation (1005/2009)

Contains no substance subject to REGULATION (EU) No 1005/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 September 2009 on substances that deplete the ozone layer.

Explosives Precursors Regulation (2019/1148)

Contains no substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors.

Drug Precursors Regulation (273/2004)

Contains no substance subject to Regulation (EC) 273/2004 of the European Parliament and of the Council of 11 February 2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances.

15.1.2. National regulations

Germany

Water hazard class (WGK) : WGK 1, Slightly hazardous to water (Classification according to AwSV, Annex 1).

22.09.2023 (Revision date) EN (English) 11/12

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Chemicals Prohibition Ordinance (ChemVerbotsV)

: This product is subject to ChemVerbotsV Annex 2 Entry 1. The following requirements must be observed: authorization requirement (according to § 6 paragraph 1 sentence 1), basic requirements for carrying out the delivery (according to § 8 paragraph 1, 3 and 4), identification and documentation (according to § 9 paragraph 1 to 3) and exclusion of the shipping route (according to § 10).

Hazardous Incident Ordinance (12. BlmSchV)

: Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

Netherlands

SZW-lijst van kankerverwekkende stoffen SZW-lijst van mutagene stoffen NIET-limitatieve lijst van voor de voortplanting

giftige stoffen - Borstvoeding

NIET-limitatieve lijst van voor de voortplanting giftige stoffen - Vruchtbaarheid

NIET-limitatieve lijst van voor de voortplanting

: SODIUM BORATE, Boric acid EPR are listed : SODIUM BORATE, Boric acid EPR are listed

: None of the components are listed

: None of the components are listed

: None of the components are listed

giftige stoffen – Ontwikkeling

Denmark

Danish National Regulations

: Young people below the age of 18 years are not allowed to use the product Pregnant/breastfeeding women working with the product must not be in direct contact with the product

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Full text of H- and EUH-statements:	
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
H312	Harmful in contact with skin.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H360D	May damage the unborn child.
H360FD	May damage fertility. May damage the unborn child.
Repr. 1B	Reproductive toxicity, Category 1B

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

22.09.2023 (Revision date) EN (English) 12/12