Printing date 07.09.2020 Version: 1.01 Revision: 24.01.2020

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

1.1 Product identifier

Trade name: <u>FLEX W 02/04</u>
Article number: 443.301

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

Sector of Use

SU21 Consumer uses: Private households / general public / consumers

SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

Product category PC31 Polishes and wax blends

Application of the substance / the mixture Car care product

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

FLEX - Elektrowerkzeuge GmbH

Bahnhofstraße 15 D-71711 Steinheim Tel.: +49(0)7144828-0 Fax: +49(0)714425899 E-Mail: info@flex-tool.com

Further information obtainable from: Phone +49(0)7144828-0

1.4 Emergency telephone number: +49 (0)7144828-0 (Only during business hours)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

The product is not classified, according to the CLP regulation.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 Void

Hazard pictograms Void

Signal word Void

Hazard statements Void

Precautionary statements P102 Keep out of reach of children.

Additional information:

EUH210 Safety data sheet available on request.

2.3 Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable. **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Description: Aqueous formulation of waxes and paint-compatible silicones

EC No 926-141-6	Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2%	10 - <15%
Reg.nr.: 01-2119456620-43-xxxx	aromatics	
	Alternative CAS number: 64742-47-8	
	🕸 Asp. Tox. 1, H304	
EC No 934-956-3	Hydrocarbons, C15-C20, n-alkanes, isoalkanes, cyclics, <	1 - <3%
Reg.nr.: 01-2119827000-58-xxxx	0.03% aromatics	
	Alternative CAS number: 64742-46-7	
	🕸 Asp. Tox. 1, H304	
EC No 934-954-2	Hydrocarbons, C13-C16, n-alkanes, isoalkanes, cyclics, <	1 - <3%
Reg.nr.: 01-2119826592-36-xxxx	0.03% aromatics	
	Alternative CAS number: 64742-46-7	
	♦ Asp. Tox. 1, H304	
EC No 920-107-4	Hydrocarbons, C12-C15, n-alkanes, isoalkanes, cyclics, < 2%	1 - <3%
Reg.nr.: 01-2119453414-43-xxxx	aromatics	
	Alternative CAS number: 64742-47-8	
	♦ Asp. Tox. 1, H304	

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Trade name: FLEX W 02/04

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Additional information: For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information: No special measures required. **After inhalation:** No special measures required

After skin contact:

Generally the product does not irritate the skin.

Wash the areas of skin affected with water and a mild detergent.

After eye contact: Rinse opened eye for several minutes under running water.

After swallowing: Do not induce vomiting; call for medical help immediately.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment in accordance with the doctor's assessment of the patient's condition. Symptomatic treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.

5.2 Special hazards arising from the substance or mixture No further relevant information available.

5.3 Advice for firefighters

Protective equipment:

The normal measures for firefighting are to be taken.

Do not enter the hazardous area without a self-contained breathing apparatus.

See Section 8 for information on personal protection equipment.

Additional information

Collect contaminated fire fighting water separately. It must not enter the sewage system.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures Not required.

6.2 Environmental precautions:

Do not allow to penetrate the ground/soil.

Do not allow to enter sewers/ surface or ground water.

6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling No special precautions are necessary if used correctly. **Information about fire - and explosion protection:** No special measures required.

7.2 Conditions for safe storage, including any incompatibilities Storage:

Requirements to be met by storerooms and receptacles: Provide solvent resistant, sealed floor.

Information about storage in one common storage facility: Store away from foodstuffs.

Further information about storage conditions:

Protect from frost.

Recommended storage temperature: 20 °C.

(Contd. on page 3)

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Trade name: FLEX W 02/04

7.3 Specific end use(s) No further relevant information available.

(Contd. of page 2)

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with limit	values that require monitoring at the workplace:
Hydrocarbons, C11-0	C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics
RCP-TWA (EU)	Long-term value: 1200 mg/m³, 165 ppm Vapour / Total Hydrocarbons
Hydrocarbons, C15-0	C20, n-alkanes, isoalkanes, cyclics, < 0.03% aromatics
GERMAN RCP-METH	OD (EU) Long-term value: 600 mg/m³ 2 (II) / AGW (German TRGS 900)
Hydrocarbons, C13-0	C16, n-alkanes, isoalkanes, cyclics, < 0.03% aromatics
GERMAN RCP-METH	OD (EU) Long-term value: 600 mg/m³ 2 (II) / AGW (German TRGS 900)
Hydrocarbons, C12-0	C15, n-alkanes, isoalkanes, cyclics, < 2% aromatics
GERMAN RCP-METH	OD (EU) Long-term value: 600 mg/m³ 2 (II) / AGW (German TRGS 900)

Additional information: The lists valid during the making were used as basis.

8.2 Exposure controls

Suitable technical control devices

Ensure good ventilation. This can be achieved by localised extraction or general ventilation. If this is not sufficient to keep the concentration below the occupational exposure limit, suitable breathing protection is to be worn.

Personal protective equipment:

General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

Keep away from foodstuffs, beverages and feed. Wash hands before breaks and at the end of work.

Respiratory protection:

Not required in normal cases

Ensure good ventilation/exhaustion at the workplace. **Protection of hands:** Not required in normal cases. **Eye protection:** Not required in normal cases

SECTION 9: Physical and chemical properties

0.1 Information on basis abusinal an	d chamical proportion	
9.1 Information on basic physical an General Information	a chemical properties	
Appearance:		
Form:	Fluid	
Colour:	Yellow	
Odour:	Fruit-like	
Odour threshold:	Not determined.	
pH-value at 20 °C:	7.0 - 8.0	
Change in condition		
Melting point/freezing point:	Undetermined.	
Initial boiling point and boiling ran	ge: 100 - 270 °C	
Flash point:	Not applicable.	
Flammability (solid, gas):	Not applicable.	
Decomposition temperature:	Not determined.	
Auto-ignition temperature:	Product is not selfigniting.	

(Contd. on page 4)

Printing date 07.09.2020 Version: 1.01 Revision: 24.01.2020

Trade name: FLEX W 02/04

		(Contd. of page
Explosive properties:	Product does not present an explosion hazard.	
Explosion limits:		
Lower:	Explosion limits components:	
	0,6Vol% (Main ingredient data)	
Upper:	Explosion limits components:	
	7,0Vol.% (Main ingredient data)	
Vapour pressure:	Not determined.	
Density at 20 °C:	0.95 - 0.96 g/cm³	
Relative density	Not determined.	
Vapour density	Not determined.	
Evaporation rate	Not determined.	
Solubility in / Miscibility with		
water:	Partly miscible.	
Partition coefficient: n-octanol/water:	Not determined.	
Viscosity:		
Flow time at 20 °C	>60 s (DIN EN ISO 2431/6mm)	
Dynamic at 20 °C:	5000 - 8000 mPas	
Kinematic at 40 °C:	>20.5 mm²/s	
9.2 Other information	No further relevant information available.	

SECTION 10: Stability and reactivity

- 10.1 Reactivity No dangerous reactions known.
- 10.2 Chemical stability Stable under normal conditions.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- 10.5 Incompatible materials: strong oxidizing agents
- 10.6 Hazardous decomposition products: No dangerous decomposition products known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects There are no toxicological findings on this mixture. **Acute toxicity** Based on available data, the classification criteria are not met.

Aliphatic	and cyclic	-aliphatic hydrocarbon mixture:
Oral	LD50	>5000 mg/kg (rat) (structurally similar material[OECD 401 equivalent])
Dermal	LD50	>5000 mg/kg (rabbit) (structurally similar material[OECD 402 equivalent])
Inhalative	LC50 / 4h	>4951 mg/m³ (rat) (structurally similar material[OECD 403 equivalent])

Skin corrosion/irritation Based on available data, the classification criteria are not met.

Serious eye damage/irritation Based on available data, the classification criteria are not met.

Respiratory or skin sensitisation Based on available data, the classification criteria are not met.

CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)

None of the ingredients are known to have effects which are carcinogenic, mutagenic or harmful to reproduction.

Germ cell mutagenicity Based on available data, the classification criteria are not met.

Carcinogenicity Based on available data, the classification criteria are not met.

Reproductive toxicity Based on available data, the classification criteria are not met.

STOT-single exposure Based on available data, the classification criteria are not met.

STOT-repeated exposure Based on available data, the classification criteria are not met.

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Trade name: FLEX W 02/04

(Contd. of page 4)

Aspiration hazard

Viscosity: > 20,5mm²/s (40°C)

Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1 Toxicity There are no ecotoxicological data available on this mixture.

Aquatic toxic	city:
Aliphatic and	d cyclic-aliphatic hydrocarbon mixture:
LL0 96h	1000 mg/l (Oncorhynchus mykiss) (structurally similar material)
EL0 / 48h	1000 mg/l (Daphnia magna) (structurally similar material)
EL0 / 72h	1000 mg/l (Pseudokirchneriella subcapitata) (structurally similar material)
NOELR 72 h	1000 mg/l (Pseudokirchneriella subcapitata) (structurally similar material)
12.2 Persiste	ence and degradability
Hydrocarbou	as C11 C14 n alkanos ispalkanos cyclics < 2% aromatics

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics

Biodegradiation 69 % (28d)

Aliphatic and cyclic-aliphatic hydrocarbon mixture:

Biodegradiation 67.6 % (28d)

12.3 Bioaccumulative potential No further relevant information available.

12.4 Mobility in soil No further relevant information available.

Additional ecological information:

General notes:

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

12.5 Results of PBT and vPvB assessment

PBT: Not applicable. **vPvB:** Not applicable.

12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Not classified as hazardous waste according to Annex III to Directive 2008/98/EC.

Recommendation Waste must be disposed of while observing the local, official regulations.

European waste catalogue

- 1) Disposal / product
- 2) Disposal / contaminated packaging

12 01 99 1	wastes not	otherwise	specified
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15 01 02 plastic packaging

14.1 UN-Number		
ADR, IMDG, IATA	Void	
14.2 UN proper shipping name		
ADR	Void	
IMDG, IATA	Void	
14.3 Transport hazard class(es)		
ADR, ADN, IMDG, IATA		
Class	Void	
14.4 Packing group		
ADR, IMDG, IĂTA	Void	

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Trade name: FLEX W 02/04

(Contd. of page 5) 14.5 Environmental hazards: Marine pollutant: No 14.6 Special precautions for user Not applicable. 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code Not applicable. UN "Model Regulation": Void

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture European Directives:

EC/1907/2006 (REACh) EC/1272/2008 (CLP) EC/648/2004

National regulations:

Information about limitation of use:

Employment restrictions concerning juveniles must be observed.

Employment restrictions concerning pregnant and lactating women must be observed.

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relevant phrases

H304 May be fatal if swallowed and enters airways.

Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

NOEL = No Observed Effect Level

NOEC = No Observed Effect Concentration

LC = letal Concentration

EC50 = half maximal effective concentration

log POW = Octanol / water partition coefficient

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

ATE: acute toxicity estimate

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

IOELV = indicative occupational exposure limit values Asp. Tox. 1: Aspiration hazard – Category 1

Version history and indication of changes: Replaces version 1.00.

Printing date 07.09.2020 Version: 2.01 Revision: 24.01.2020

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

1.1 Product identifier

Trade name: <u>FLEX P 03/06-LD</u>
Article number: 403.377

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

Sector of Use

SU21 Consumer uses: Private households / general public / consumers

SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

Product category PC31 Polishes and wax blends

Application of the substance / the mixture Car care product

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

FLEX - Elektrowerkzeuge GmbH

Bahnhofstraße 15 D-71711 Steinheim Tel.: +49(0)7144828-0 Fax: +49(0)714425899 E-Mail: info@flex-tool.com

Further information obtainable from: Phone +49(0)7144828-0

1.4 Emergency telephone number: +49 (0)7144828-0 (Only during business hours)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

The product is not classified, according to the CLP regulation.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 Void

Hazard pictograms Void

Signal word Void

Hazard statements Void

Precautionary statements P102 Keep out of reach of children.

Additional information:

EUH210 Safety data sheet available on request.

2.3 Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable. **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Description: Emulsion of solvents, abrasives and additives

	Dangerous components:		
Ī	EC No 920-114-2	Hydrocarbons, C14-C19, isoalkanes, cyclics, < 2% aromatics	15 - <20%
	Reg.nr.: 01-2119459347-30-xxxx	Alternative CAS number: 64742-46-7	
		♦ Asp. Tox. 1, H304	
ſ	CAS: 107-98-2	1-Methoxy-2-propanol	3 - <5%
	EINECS: 203-539-1 Reg.nr.: 01-2119457435-35-xxxx	♠ Flam. Liq. 3, H226; ♠ STOT SE 3, H336	

Additional information: For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information: No special measures required.

After inhalation: Supply fresh air.

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Trade name: FLEX P 03/06-LD

(Contd. of page 1)

After skin contact:

Generally the product does not irritate the skin.

Wash the areas of skin affected with water and a mild detergent.

After eye contact: Rinse opened eye for several minutes under running water. After swallowing: Do not induce vomiting; call for medical help immediately.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment in accordance with the doctor's assessment of the patient's condition. Symptomatic treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.

5.2 Special hazards arising from the substance or mixture No further relevant information available.

5.3 Advice for firefighters

Protective equipment:

The normal measures for firefighting are to be taken.

Do not enter the hazardous area without a self-contained breathing apparatus.

See Section 8 for information on personal protection equipment.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures Not required.

6.2 Environmental precautions:

Do not allow to penetrate the ground/soil.

Do not allow to enter sewers/ surface or ground water.

6.3 Methods and material for containment and cleaning up:

Pick up mechanically.

Absorb liquid components with liquid-binding material.

Dispose contaminated material as waste according to item 13.

6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling No special precautions are necessary if used correctly. **Information about fire - and explosion protection:** No special measures required.

7.2 Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles: Provide solvent resistant, sealed floor.

Information about storage in one common storage facility: Store away from foodstuffs.

Further information about storage conditions:

Store receptacle in a well ventilated area.

Protect from frost.

Recommended storage temperature: 20 °C.

7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:

CAS: 107-98-2 1-Methoxy-2-propanol

WEL (Great Britain) Short-term value: 560 mg/m³, 150 ppm

Long-term value: 375 mg/m³, 100 ppm

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(Contd. on page 3)

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Trade name: FLEX P 03/06-LD

			(Contd. of page 2
IOELV (E	EU)	Short-term value: 568 mg/m³, 150 ppm Long-term value: 375 mg/m³, 100 ppm Skin	, , ,
DNELs			
CAS: 10	7-98-2 1	Methoxy-2-propanol	
Oral	DNEL	3.3 mg/kg (consumer) (long-term / systemic effects)	
Dermal	DNEL	18.1 mg/kg (consumer) (long-term / systemic effects)	
		50.6 mg/kg (worker) (long-term / systemic effects)	
Inhalativ	e DNEL	43.9 mg/m³ (consumer) (long-term / systemic effects)	
		553.5 mg/m³ (worker) (short-term / local effects)	
	DNEL	369 mg/m³ (worker) (long-term / systemic effects)	
PNECs			
CAS: 10	7-98-2 1	Methoxy-2-propanol	
PNEC 1	00 mg/l (STP)	
1	00 mg/l (water (intermittent release))	
1	0 mg/I (и	rater (fresh water))	
1	mg/l (wa	ter (sea water))	
PNEC 2	.47 mg/k	g (gro)	
4	1.6 mg/k	g (sediment (fresh water))	
4	.17 mg/k	g (sediment (sea water))	

Additional information: The lists valid during the making were used as basis.

8.2 Exposure controls

Suitable technical control devices

Ensure good ventilation. This can be achieved by localised extraction or general ventilation. If this is not sufficient to keep the concentration below the occupational exposure limit, suitable breathing protection is to be worn.

Personal protective equipment:

General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

Respiratory protection:

Not required in normal cases

Ensure good ventilation/exhaustion at the workplace. **Protection of hands:** Not required in normal cases. **Eye protection:** Not required in normal cases

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and c General Information	hemical properties
Appearance:	
Form:	Emulsion
Colour:	White
Odour:	Solvent-like
Odour threshold:	Not determined.
pH-value:	Not applicable.
Change in condition Melting point/freezing point: Initial boiling point and boiling range:	Undetermined. 100 - 355 °C
Flash point:	Not applicable.
Flammability (solid, gas):	Not applicable.

(Contd. on page 4)

Printing date 07.09.2020 Version: 2.01 Revision: 24.01.2020

Trade name: FLEX P 03/06-LD

	(Contd. of	ра
Decomposition temperature:	Not determined.	
Auto-ignition temperature:	Product is not selfigniting.	
Explosive properties:	Product does not present an explosion hazard.	
Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
Vapour pressure:	Not determined.	
Density at 20 °C:	0.98 - 0.99 g/cm³	
Relative density	Not determined.	
Vapour density	Not determined.	
Evaporation rate	Not determined.	
Solubility in / Miscibility with		
water:	Partly miscible.	
Partition coefficient: n-octanol/water:	Not determined.	
Viscosity:		
Kinematic at 40 °C:	>20.5 mm²/s	
9.2 Other information	No further relevant information available.	

SECTION 10: Stability and reactivity

- 10.1 Reactivity No dangerous reactions known.
- 10.2 Chemical stability Stable under normal conditions.
- 10.3 Possibility of hazardous reactions No dangerous reactions known.
- **10.4 Conditions to avoid** See Section 7 for information on safe handling.
- 10.5 Incompatible materials: strong oxidizing agents
- 10.6 Hazardous decomposition products: No dangerous decomposition products known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects There are no toxicological findings on this mixture. Acute toxicity Based on available data, the classification criteria are not met.

LD/LC50	LD/LC50 values relevant for classification:							
Hydrocari	Hydrocarbons, C14-C19, isoalkanes, cyclics, < 2% aromatics							
Oral	LD50	>5,000 mg/kg (rat) (OECD 401)						
Dermal	LD50	>2,000 mg/kg (rabbit) (OECD 402)						
Inhalative	LC50/4d	>5,266 mg/l (rat) (Aerosol (OECD 403))						
CAS: 107-	98-2 1-M	ethoxy-2-propanol						
Oral	LD50	4,016 mg/kg (rat)						
Dermal	LD50	>2,000 mg/kg (rat)						
Inhalative	LC0 / 6h	>7,000 ppm (rat)						

Primary irritant effect:

Skin corrosion/irritation Based on available data, the classification criteria are not met.

Serious eye damage/irritation Based on available data, the classification criteria are not met.

Respiratory or skin sensitisation Based on available data, the classification criteria are not met.

CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)

Germ cell mutagenicity Based on available data, the classification criteria are not met.

Carcinogenicity Based on available data, the classification criteria are not met.

Reproductive toxicity Based on available data, the classification criteria are not met.

STOT-single exposure Based on available data, the classification criteria are not met.

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Trade name: FLEX P 03/06-LD

(Contd. of page 4)

STOT-repeated exposure Based on available data, the classification criteria are not met.

Aspiration hazard

Viscosity: $> 20,5mm^2/s$ (40°C)

Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1 Toxicity There are no ecotoxicological data available on this mixture.

<u> </u>	Aquatic toxicity:							
	Hydrocarbons, C14-C19, isoalkanes, cyclics, < 2% aromatics							
LL0 96h	87,556 mg/l (Oncorhynchus mykiss)							
ErL0 72h	n 1,000 mg/l (Pseudokirchneriella subcapitata)							
NOELR 72 h	1,000 mg/l (Pseudokirchneriella subcapitata)							
NOELR 21d	5 mg/l (Daphnia magna)							
ELO 48 h	1,000 mg/l (Daphnia magna)							
CAS: 107-98	-2 1-Methoxy-2-propanol							
LC50 / 96h	>6,800 mg/l (Leuciscus idus) (DIN38412)							
LC50 / 48h	23,300 mg/l (Daphnia magna)							
EC50	>1,000 mg/l (Pseudokirchneriella subcapitata) (7d)							
EC50/3h	>1,000 mg/l (activated sludge) (OECD 209)							

12.2 Persistence and degradability

CAS: 107-98-2 1-Methoxy-2-propanol

Biodegradiation 90-100 % (OEECD 301E)

12.3 Bioaccumulative potential

CAS: 107-98-2 1-Methoxy-2-propanol

log Kow ≤0.43 log Kow (25°C)

12.4 Mobility in soil No further relevant information available.

Additional ecological information:

General notes: The product may not be released into the environment without control.

12.5 Results of PBT and vPvB assessment

PBT: Not applicable. **vPvB:** Not applicable.

12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Not classified as hazardous waste according to Annex III to Directive 2008/98/EC.

Recommendation Waste must be disposed of while observing the local, official regulations.

European waste catalogue

1) Disposal / product

2) Disposal / contaminated packaging

12 01 99 wastes not otherwise specified

15 01 02 plastic packaging

SECTION 14: Transport information

14.1 UN-Number ADR, IMDG, IATA	Void
14.2 UN proper shipping name ADR, IMDG, IATA	Void

(Contd. on page 6)

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Trade name: FLEX P 03/06-LD

		(Contd. of page 8
14.3 Transport hazard class(es)		
ADR, ADN, IMDG, IATA Class	Void	
14.4 Packing group ADR, IMDG, IATA	Void	
14.5 Environmental hazards: Marine pollutant:	No	
14.6 Special precautions for user	Not applicable.	
14.7 Transport in bulk according to Anno Marpol and the IBC Code	ex II of Not applicable.	
UN "Model Regulation":	Void	

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture European Directives:

EC/1907/2006 (REACh) EC/1272/2008 (CLP) EC/648/2004

National regulations:

Information about limitation of use:

Employment restrictions concerning juveniles must be observed.

Employment restrictions concerning pregnant and lactating women must be observed.

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relevant phrases

H226 Flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H336 May cause drowsiness or dizziness.

Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

NOEL = No Observed Effect Level NOEC = No Observed Effect Concentration LC = letal Concentration

EC50 = half maximal effective concentration

log POW = Octanol / water partition coefficient

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

ATE: acute toxicity estimate

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

DNEL: Derived No-Effect Level (REACH)
PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

IOELV = indicative occupational exposure limit values Flam. Liq. 3: Flammable liquids – Category 3

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3 Asp. Tox. 1: Aspiration hazard – Category 1

Version history and indication of changes: Replaces version 2.00.





NO.1117060063

检测报告

Test Report

样品名称:

锂电池包 AP 18.0/5.0 18V 5.0Ah 90Wh

Name of Sample:

Li-ion battery pack AP 18.0/5.0 18V 5.0Ah 90Wh

委托单位:

南京德朔实业有限公司

Consignor:

上海化工研究院检测中心

Shanghai Research Institute of Chemical Industry Testing Centre

上海化工研究院检测中心 检测报告

SRICI Testing Centre Test Report

NO. 1117060063

1/11

		1/11
样品名称	中文 Chinese	锂电池包 AP 18.0/5.0 18V 5.0Ah 90Wh
Name of Sample	英文 English	Li-ion battery pack AP 18.0/5.0 18V 5.0Ah 90Wh
样品编号 Sample No.		1117060063
委托单位 Consignor		南京德朔实业有限公司
生产单位 Manufacturer		南京德朔实业有限公司 Nanjing Chervon Industry co.,Ltd
检测方法 Test method	ST/SG/AC. DANGER	联合国《关于危险货物运输的建议书 试验和标准手册》 10/11/Rev.6 38.3 UNITED NATIONS "Recommendations on the TRANSPORT OF OUS GOODS" Manual of Tests and Criteria ST/SG/AC.10/11/Rev.6 38.3
判定标准 Criterion	ST/SG/AC. I DANGER	联合国《关于危险货物运输的 0/11/Rev. 6 38.3 UNITED NATIONS OUS GOODS Manual of Tests and Criteria ST/SG/AC. 10/11/Rev. 6 38.3
样品外观 Appearance		黑色塑胶外壳 Black Plastics cement shell
样品接受日期 Accepted Date	2017	-06-08 检测起送日期 2017-06-12 ~ 2017-07-06 Test Date
检测项目 Test Items	A1	高度模拟:热测试:振动:冲击:外短路:撞击:过充电:强制放电 citude simulation,Thermal test, circuit,Impact,Overcharge,Forced discharge
检测结论 Conclusion	ST/SG/AC. 10/ The sample h	品符合联合国《关于危险货物运输的建议书 试验和标准手册》 11/Rev. 6 38.3标准要求。 as passed the test items of UNITED NATIONS "Recommendations on the DANGEROUS GOODS" Manual of Tests and Criteria ST/SG/AC. 10/11/Rev. 6 生效日期(Date): 2017-07-06
备注 Comment	可充电锂电池	组Rechargeable Lithium Battery./
委托单位地址 Consignor Address		/ 邮政编码 211106 Post Code

批准

Approver:

职务 Title: #11/20

审核

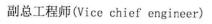
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Compiler:

夏运





SRICI Testing Centre Test Report NO. 1117060063

2/11

								V-0-00-10-00-1
序号 No.	检测项目名称 Name of Test Items	标准要求。 Standard red Clause Num	uirement o ber of Star	r The ndard		检测结果 Test Result	本项结· Conclusi	NOSCHOL
1	高度模拟 Altitude simulation	联合国《关于危险货物运输的建议书 试验和标手册》ST/SG/AC.10/11/Rev.6 38.3 试验T.1 UN Manual of Tests and Criteria ST/SG/AC.10/11/Rev.6 Section 38.3 Test T				见附表 1 See Appendix 1	合格 Passed	/
2	热测试 Thermal test	联合国《关于危险货物运输的建议书 试验和标 手册》ST/SG/AC.10/11/Rev.6 38.3 试验T.2 UN Manual of Tests and Criteria ST/SG/AC.10/11/Rev.6 Section 38.3 Test T			. 2	见附表 2 See Appendix 2	合格 Passed	/
3	振动 Vibration	联合国《关于危险货物运输的建议书 试验和标手册》ST/SG/AC.10/11/Rev.6 38.3 试验T.3 UN Manual of Tests and Criteria ST/SG/AC.10/11/Rev.6 Section 38.3 Test T			3	见附表 3 See Appendix 3	合格 Passed	/
4	冲击 Shock	联合国《关于危险货物运输的建议书 试验和标 手册》ST/SG/AC.10/11/Rev.6 38.3 试验T.4 UN Manual of Tests and Criteria ST/SG/AC.10/11/Rev.6 Section 38.3 Test T				见附表 4 See Appendix 4	合格 Passed	/
5	外短路 External short circuit	联合国《关于危险货物运输的建议书 试验和标手册》ST/SG/AC.10/11/Rev.6 38.3 试验T.5 UN Manual of Tests and Criteria ST/SG/AC.10/11/Rev.6 Section 38.3 Test T				见附表 5 See Appendix 5	合格 Passed	/
6	撞击 Impact	联合国《关于危险货物运输的建议书 试验和标 手册》ST/SG/AC.10/11/Rev.6 38.3 试验T.6 UN Manual of Tests and Criteria ST/SG/AC.10/11/Rev.6 Section 38.3 Test T				见附表 6 See Appendix 6	合格 Passed	/
7	过充电 Overcharge	联合国《关于危险货华 手册》ST/SG/AC.10/1 UN Manual of Tests ST/SG/AC.10/11/Rev.	1/Rev. 6 38. and Criteri	3 试验T.7 a		见附表 7 See Appendix 7	合格 Passed	/
8	强制放电 Forced discharge	联合国《关于危险货物运输的建议书 试验和 手册》ST/SG/AC.10/11/Rev.6 38.3 试验T.8 UN Manual of Tests and Criteria ST/SG/AC.10/11/Rev.6 Section 38.3 Test				见附表 8 See Appendix 8	合格 Passed	/
10	d测环境条件 st Environment Condition	环境温度:20℃-22℃;环境湿度:/% Ambient temperature:20℃-22℃;Ambient humidity:/%					/%	
分	包检验情况	检测项目 Test Item				/		
	contracted Test Condition	分包实验室 Subcontracted	名称 Name			/	邮编 Post Code	/
		Laboratory	地址 Address			/	电话 Tel	/

SRICI Testing Centre Test Report — Appendix

NO. 1117060063

1

3/11

								3/11
序号 No.	1	25000 101000 10	页目名称 Test Items	高度模拟				
					e simulation			
样品 编号 Sample No.	样品状态 Sample Status	质量 Mass /g	Before 开路电压 OCV /V	成验 质量 Mass	开路电压 OCV /V	质量损失 Mass Loss /%	剩余电压 Residual OCV /%	其他 现象 Other Event
001	1CYC完全充电 1CYC Fully charged	745. 39	20. 69	745. 35	20. 66	0. 01	99. 86	0
002	1CYC完全充电 1CYC Fully charged	744. 54	20. 66	744. 48	20. 63	0. 01	99. 85	0
003	1CYC完全充电 1CYC Fully charged	744. 17	20. 63	744. 17	20. 61	0.00	99. 90	0
004	1CYC完全充电 1CYC Fully charged	746. 68	20. 67	746. 66	20. 64	0.00	99. 85	О
005	50CYC完全充电 50CYC Fully charged	746. 11	20. 64	746. 15	20. 62	0.00	99. 90	О
006	50CYC完全充电 50CYC Fully charged	742. 39	20. 67	742. 44	20. 56	0.00	99. 47	0
007	50CYC完全充电 50CYC Fully charged	742. 21	20. 53	742. 32	20. 52	0.00	99. 95	О
008	50CYC完全充电 50CYC Fully charged	746. 13	20. 69	746. 10	20.66	0.00	99. 86	0
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备注: L-泄漏 V-漏气 D-解体 R-破裂 F-起火 O-无泄漏、无漏气、无解体、无破裂、无起火。 Note: L-Leakage V-Venting D-Disassembly R-Rupture F-Fire O-No Leakage,No Venting, No Disassembly,No Rupture & No Fire. 一個十八個人

SRICI Testing Centre Test Report—Appendix

2

NO. 1117060063

4/11

									4/11
序号 No.	2	9.6	页目名称 Test Items	热测试 Thermal	t	est			
样品	样品状态	试验前	Before			台 After	质量损失	剩余电压	其他
编号 Sample No.	Sample Status	质量 Mass /g	开路电压 OCV /V	质量 Mass /g		开路电压 OCV /V	Mass Loss	Residual OCV	现象 Other Event
001	1CYC完全充电 1CYC Fully charged	745. 35	20. 66	744. 63		20. 46	0. 10	99. 03	0
002	1CYC完全充电 1CYC Fully charged	744. 48	20. 63	743. 82		20. 45	0.09	99. 13	О
003	1CYC完全充电 1CYC Fully charged	744. 17	20. 61	743. 52		20. 45	0.09	99. 22	О
004	1CYC完全充电 1CYC Fully charged	746. 66	20. 64	746. 04		20. 47	0.08	99. 18	О
005	50CYC完全充电 50CYC Fully charged	746. 15	20. 62	745. 52		20. 46	0.08	99. 22	О
006	50CYC完全充电 50CYC Fully charged	742. 44	20. 56	741. 73		20. 47	0. 10	99. 56	О
007	50CYC完全充电 50CYC Fully charged	742. 32	20. 52	741. 62		20. 40	0.09	99. 42	О
008	50CYC完全充电 50CYC Fully charged	746. 10	20. 66	745. 44		20. 48	0.09	99. 13	О
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备注: L-泄漏 V-漏气 D-解体 R-破裂 F-起火 0-无泄漏、无漏气、无解体、无破裂、无起火。 Note: L-Leakage V-Venting D-Disassembly R-Rupture F-Fire O-No Leakage, No Venting, No Disassembly, No Rupture & No Fire.

SRICI Testing Centre Test Report — Appendix

NO. 1117060063

5/11

					_				
序号	3	04/000/08/08/04/	页目名称	振动					
No.		Name of Test Items		Vibrati	or	ı			
样品	样品状态	试验前 Before		试验后 After			质量损失	剩余电压	其他
编号	Sample Status	质量	开路电压	质量		开路电压	Mass Loss	Residual	现象
Sample		Mass	OCV	Mass		OCV		OCV	Other
No.		/g	/V	/g	Ц	/V	/%	/%	Event
001	1CYC完全充电 1CYC Fully charged	744. 63	20. 46	744. 78		20. 45	0.00	99. 95	О
002	1CYC完全充电 1CYC Fully charged	743. 82	20. 45	743. 98		20. 43	0.00	99. 90	0
003	1CYC完全充电 1CYC Fully charged	743. 52	20. 45	743. 74		20. 44	0.00	99. 95	0
004	1CYC完全充电 1CYC Fully charged	746. 04	20. 47	746. 29		20. 46	0.00	99. 95	О
005	50CYC完全充电 50CYC Fully charged	745. 52	20. 46	745. 78		20. 44	0.00	99. 90	0
006	50CYC完全充电 50CYC Fully charged	741. 73	20. 47	741. 98		20. 45	0.00	99. 90	0
007	50CYC完全充电 50CYC Fully charged	741. 62	20. 40	741.77		20. 39	0.00	99. 95	0
800	50CYC完全充电 50CYC Fully charged	745. 44	20. 48	745. 69	\prod	20. 46	0.00	99. 90	0
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备注: L-泄漏 V-漏气 D-解体 R-破裂 F-起火 0-无泄漏 无漏气、无解体 Note: L-Leakage V-Venting D-Disassembly R-Rupture F-Fire O-No Leakage, No Venting, No Disassembly, No Rupture & No Fire.

无漏气、无解体、无破裂、无起火。 Leakage, No Venting,

SRICI Testing Centre Test Report—Appendix 4

NO. 1117060063

6/11

								0/11
序号 No.	4	检测项目名称 Name of Test Items		冲击 Shock				
样品	样品状态	试验前 Before		试验后 After		质量损失 剩余电压		其他
编号 Sample No.	Sample Status	质量 Mass /g	开路电压 OCV /V	质量 Mass /g	开路电压 OCV /V	Mass Loss	Residual OCV /%	现象 Other Event
001	1CYC完全充电 1CYC Fully charged	744. 78	20. 45	744. 75	20. 44	0.00	99. 95	0
002	1CYC完全充电 1CYC Fully charged	743. 98	20. 43	743. 94	20. 42	0.01	99. 95	О
003	1CYC完全充电 1CYC Fully charged	743. 74	20. 44	743. 74	20. 43	0.00	99. 95	О
004	1CYC完全充电 1CYC Fully charged	746. 29	20. 46	746. 25	20. 44	0. 01	99. 90	О
005	50CYC完全充电 50CYC Fully charged	745. 78	20. 44	745. 78	20. 43	0.00	99. 95	О
006	50CYC完全充电 50CYC Fully charged	741. 98	20. 45	741. 99	20. 45	0.00	100.00	0
007	50CYC完全充电 50CYC Fully charged	741. 77	20. 39	741. 71	20. 39	0.01	100.00	0
008	50CYC完全充电 50CYC Fully charged	745. 69	20. 46	745. 63	20. 44	0.01	99. 90	0
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备注: L-泄漏 V-漏气 D-解体 R-破裂 F-起火 O-无泄漏、无漏气、无解体、无破裂、无起火。 Note: L-Leakage V-Venting D-Disassembly R-Rupture F-Fire O-No Leakage,No Venting, No Disassembly,No Rupture & No Fire.

SRICI Testing Centre Test Report—Appendix 5

7/11

NO. 1117060063

				1/1
序号	5	检测项目名		外短路
No.		Name of Test		External short circuit
样品编号 Sample No.	样品状态 Sample Status	样品表面最高 Max. External Ten /℃	ř.	其他现象 Other Event
001	1CYC完全充电 1CYC Fully charged	74. 1		0
002	1CYC完全充电 1CYC Fully charged	70.8		0
003	1CYC完全充电 1CYC Fully charged	75. 0		0
004	1CYC完全充电 1CYC Fully charged	72. 1		0
005	50CYC完全充电 50CYC Fully charged	77. 6		0
006	50CYC完全充电 50CYC Fully charged	70.9		O
007	50CYC完全充电 50CYC Fully charged	73. 6		О
008	50CYC完全充电 50CYC Fully charged	73. 1	7	O
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备注: D-解体 R-破裂 F-起火 O-无解体、无起火、无破裂。

Note: D-Disassembly R-Ruptur F-Fire O-No Disassembly, No Fire & No Rupture.

SRICI Testing Centre Test Report Appendix

NO. 1117060063

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					0/11
序号 No.	6	检测项目. Name of Tes		撞击 Impact	
样品编号 Sample No.	样品状态 Sample Status	样品表面最 Max. External Te	高温度	其他现象 Other Event	
009	1CYC 50%容量 1CYC 50% Capacity	24. 2		O	
010	1CYC 50%容量 1CYC 50% Capacity	24. 0		0	
011	1CYC 50%容量 1CYC 50% Capacity	24. 2		0	
012	1CYC 50%容量 1CYC 50% Capacity	24. 4		0	
013	1CYC 50%容量 1CYC 50% Capacity	24. 4		0	
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				24	
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夕 ン D 知		1.			

备注: D-解体 F-起火 O-无解体、无起火。

Note: D-Disassembly F-Fire O-No Disassembly & No Fire.

SRICI Testing Centre Test Report | Appendix 7 No. 1117060063

9/11

					9/11
序号 No.	7		目名称 Test Items	过充电 Overcharge	
样品编号 Sample No.	样品状态 Sample Status		其他现象 Other Event		1-20
014	1CYC完全充电 1CYC Fully charged		O O		
015	1CYC完全充电 1CYC Fully charged		0		
016	1CYC完全充电 1CYC Fully charged			0	
017	1CYC完全充电 1CYC Fully charged			0	1 11
018	50CYC完全充电 50CYC Fully charged			0	
019	50CYC完全充电 50CYC Fully charged			0	
020	50CYC完全充电 50CYC Fully charged			0	1.85
021	50CYC完全充电 50CYC Fully charged			0	TIME
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备注: D-解 Note: D-Disa	平体 F-起火 0-无解体、无起火。 assembly F-Fire O-No Disassembly & No	o Fire.			

SRICI Testing Centre Test Report—Appendix 8

10/11

NO. 1117060063

A 17				10/	
序号	8	检测项目	名称	强制放电	
No.		Name of Test	Items	Forced discharge	
样品编号	样品状态				
Sample No.	Sample Status	其他现象		e as les armanes	
000	1CYC完全放电		0	ther Event	
022	1CYC Fully discharged			O	
023	1CYC完全放电 1CYC Fully discharged			0	
004	1CYC完全放电		0		
024	1CYC Fully discharged			O	
025	1CYC完全放电 1CYC Fully discharged	ATTEN TO		0	
026	1CYC完全放电			0	
026	1CYC Fully discharged			O	
027	1CYC完全放电 1CYC Fully discharged	1		0	
000	1CYC完全放电			0	
028	1CYC Fully discharged			O	
029	1CYC完全放电 1CYC Fully discharged			0	
000	1CYC完全放电			0	
030	1CYC Fully discharged			O	
031	1CYC完全放电				
000	1CYC Fully discharged 50CYC完全放电			0	
032	50CYC Fully discharged			O	
033	50CYC完全放电		THE	0	
004	50CYC Fully discharged 50CYC完全放电			0	
034	50CYC Fully discharged			O	
035	50CYC完全放电			0	
000	50CYC Fully discharged 50CYC完全放电			0	
036	50CYC Fully discharged			O	
037	50CYC完全放电			0	
	50CYC Fully discharged 50CYC完全放电			0	
038	50CYC Fully discharged			O	
039	50CYC完全放电			0	
0.10	50CYC Fully discharged 50CYC完全放电			0	
040	50CYC Fully discharged			0	
041	50CYC完全放电			0	
20 THE 18 THE COST	50CYC Fully discharged			0	

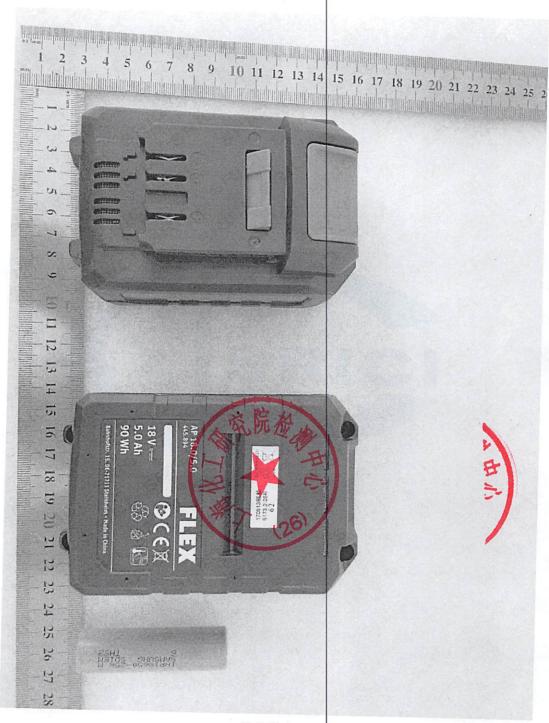
备注: D-解体 F-起火 O-无解体、无起火。

Note: D-Disassembly F-Fire O-No Disassembly & No Fire.

SRICI Testing Centre Test Report—Appendix

NO. 1117060063

11/11



报告结束