

SAFETY DATA SHEET

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

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unauthorised use of this Safety Data Sheet is strictly prohibited and may result in legal action

being taken by HP. ***

1.1. Product identifier

Trade name or designation

C4823Series

of the mixture

Registration number

Synonyms None.

Issue date 28-Jun-2013

Version number 12

23-Mar-2021 **Revision date** 26-Jan-2021 Supersedes date

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

Identified uses Inkjet printing Uses advised against None known

1.3. Details of the supplier of the safety data sheet

HP Inc UK Ltd, Regulatory Enquiries, Earley West 300 Thames Valley Park Drive, Reading, RG6 1PT

Telephone +44 20 7660 0596 (Consumer)

+44 20 7660 0403 (Commercial)

HP Inc. health effects line

1-800-457-4209 (Toll-free within the US) (Direct) 1-760-710-0048

HP Inc. Customer Care

(Toll-free within the US) 1-800-474-6836 (Direct) 1-208-323-2551

Email: hpcustomer.inquiries@hp.com

1.4 Emergency telephone

number

0207771 5307

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 as amended

2-pyrrolidone: Specific Concentration Limits, Reproductive toxicity Category 1B, fertility or the unborn child 3%. Mixture classification threshold based on data related to developmental toxicity in animals. No adverse effects on sexual function or damage to fertility have been observed in an animal study. See Section 11.

Health hazards

Serious eye damage/eye irritation Category 1 H318 - Causes serious eye

damage.

Reproductive toxicity (fertility, the unborn H360 - May damage fertility or the Category 1B

child)

unborn child.

2.2. Label elements

Label according to Regulation (EC) No. 1272/2008 as amended

2-pyrrolidone, succinic acid Contains:

Hazard pictograms



Signal word Danger

Hazard statements

Material name: C4823Series SDS UK

Causes serious eye damage. H318

H360 May damage fertility or the unborn child.

Precautionary statements

Prevention

Wear protective gloves/protective clothing/eye protection. P280

Do not handle until all safety precautions have been read and understood. P202

Obtain special instructions before use. P201

Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present P305 + P351 + P338

and easy to do. Continue rinsing

Immediately call a POISON CENTER or doctor/physician. P310 IF exposed or concerned: Get medical advice/attention. P308 + P313

Storage

Store locked up. P405

Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations. P501

Supplemental label information None.

2.3. Other hazards Potential routes of overexposure to this product are skin and eye contact. Inhalation of vapor and

ingestion are not expected to be significant routes of exposure for this product under normal use

conditions. Complete toxicity data are not available for this specific formulation.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General information

Chemical name	%	CAS-No. / EC No	. REACH Registration No.	Index No.	Notes
Water	60-7	5 7732-18-5 231-791-2	-	-	
Classification:	-				
2-pyrrolidone	<10	616-45-5 210-483-1	01-2119475471-37-XXXX	-	
Classification:	Eye Irrit. 2;H319, Re	epr. 1B;H360			
Trimethylolpropane	<10	77-99-6 201-074-9	01-2119486799-10-XXXX	-	
Classification:	Repr. 2;H361				
succinic acid	<7.5	5 110-15-6 203-740-4	01-2119896114-34-XXXX	-	
Classification:	Eye Dam. 1;H318				
C11-C15 secondary etho	xylated <2.5	68131-40-8 -	-	-	
Classification:	Acute Tox. 4;H302, Chronic 1;H410	Acute Tox. 4;H312, Sk	in Irrit. 2;H315, Eye Dam. 1;H3	318, Aquatic	

Composition comments This ink supply contains an aqueous ink formulation.

> 2-pyrrolidone: Specific Concentration Limit 3%. Mixture classification threshold based on data related to developmental toxicity in animals. No adverse effects on sexual function or damage to fertility have been observed in an animal study. See Section 11.

SECTION 4: First aid measures

General information Not available.

4.1. Description of first aid measures

Inhalation Move to fresh air. If symptoms persist, get medical attention.

Wash affected areas thoroughly with mild soap and water. If irritation persists get medical Skin contact

attention.

Eve contact Do not rub eyes. Immediately flush with large amounts of clean, warm water (low pressure) for at

least 15 minutes or until particles are removed. If irritation persists get medical attention.

If ingestion of a large amount does occur, seek medical attention. Ingestion

4.2. Most important symptoms and effects, both acute and

Not available.

delayed

Material name: C4823Series SDS UK 4.3. Indication of any immediate medical attention and special treatment needed Not available.

SECTION 5: Firefighting measures

General fire hazards Not available.

5.1. Extinguishing media

Suitable extinguishing

media

CO2, water, dry chemical, or foam

Unsuitable extinguishing

media

None known.

5.2. Special hazards arising

from the substance or mixture

Not available.

5.3. Advice for firefighters

Special protective equipment for firefighters

Special fire fighting

procedures

Not available.

Not available.

Specific methods None established.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency

personnel

Wear appropriate personal protective equipment.

For emergency responders Not available.

6.2. Environmental precautions Do not let product enter drains. Do not flush into surface water or sanitary sewer system.

6.3. Methods and material for containment and cleaning up Dike the spilled material, where this is possible. Absorb with inert absorbent such as dry clay, sand

or diatomaceous earth, commercial sorbents, or recover using pumps.

6.4. Reference to other

sections

Not available.

SECTION 7: Handling and storage

7.1. Precautions for safe

handling

Avoid contact with skin, eyes and clothing.

7.2. Conditions for safe storage, including any incompatibilities

Keep out of the reach of children. Keep away from excessive heat or cold.

Not available. 7.3. Specific end use(s)

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

No exposure limits noted for ingredient(s).

Biological limit values

No biological exposure limits noted for the ingredient(s).

Recommended monitoring

procedures

Not available.

Derived no effect levels (DNELs)

Components	Туре	Route	Value	Form
2-pyrrolidone (CAS 616-45-5)	Consumers	Dermal	0.67 mg/kg bw/d	Systemic long term
		Inhalation	1.985 mg/m3	Systemic long term
		Oral	0.67 mg/kg bw/d	Systemic long term
	Workers	Dermal	4.2 mg/kg bw/d	Systemic long term
		Inhalation	29.62 mg/m3	Systemic long term
succinic acid (CAS 110-15-6)	Consumers	Dermal	67 mg/kg	Systemic short term
		Dermal	43 mg/kg	Systemic long term
		Inhalation	10 mg/m3	Local long term
		Inhalation	10 mg/m3	Local short term
		Inhalation	10 mg/m3	Systemic long term
		Inhalation	10 mg/m3	Systemic short term
		Oral	67 mg/kg	Systemic short term
	Workers	Dermal	71 mg/kg	Systemic long term
		Dermal	67 mg/kg	Systemic short term
		Inhalation	10 mg/m3	Local long term

Material name: C4823Series SDS UK

9458 Version #: 12 Revision date: 23-Mar-2021 Issue date: 28-Jun-2013

Components	Туре	Route	Value	Form
		Inhalation	10 mg/m3	Local short term
		Inhalation	10 mg/m3	Systemic long term
		Inhalation	10 mg/m3	Systemic short term
Predicted no effect concentratio	ns (PNECs)			
Components	Туре	Route	Value	Form
2-pyrrolidone (CAS 616-45-5)	Not applicable	Freshwater	0.5 mg/l	
		Intermittent	0.5 mg/l	Releases
		Marine water	0.05 mg/l	
		Sediment	0.4205 mg/kg	Freshwater
		Soil	0.0612 mg/kg	
		STP	10 mg/l	Sewage Treatment Plant
succinic acid (CAS 110-15-6)	Not applicable	Freshwater	0.1 mg/l	
		Intermittent	1 mg/l	Releases
		Marine water	0.01 mg/l	
		Sediment	0.079 mg/kg	Freshwater
		Sediment	0.0079 mg/kg	Marine water
		Soil	0.0177 mg/kg	
		STP	3 mg/l	Sewage Treatment Plant
Exposure guidelines	Exposure limits have not been est	ablished for this	product.	
3.2. Exposure controls				
Appropriate engineering controls	Use in a well ventilated area. Provide adequate ventilation.			
ndividual protection measures,	such as personal protective equi	pment		
General information	Not available.			
Eye/face protection	Not available.			
Skin protection				
- Hand protection	Recommended gloves: Nitrile 4 mil minimum thickness.			
- Other	Use personal protective equipment to minimize exposure to skin and eye.			
	200 Facilities Facilitate additional to imminize appearance and and ayou			

Handle in accordance with good industrial hygiene and safety practice.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

controls

Hygiene measures

Environmental exposure

Respiratory protection Thermal hazards

Physical state Liquid. Not available. **Form** Yellow Color Not available. Odor **Odor threshold** Not available. 3.8 - 4.3 Melting point/freezing point Not available. Initial boiling point and boiling Not determined

range

> 230.0 °F (> 110.0 °C) Pensky-Martens Closed Cup Flash point

Not available.

Not available.

Not available.

Not determined **Evaporation rate** Flammability (solid, gas) Not available. Upper/lower flammability or explosive limits Flammability limit - lower Not determined

(%)

Flammability limit - upper Not available.

(%)

Not determined Vapor pressure Vapor density Not available.

Material name: C4823Series

Solubility(ies)

Solubility (water) Soluble in water

Partition coefficient Not available.

(n-octanol/water)

Auto-ignition temperature

Decomposition temperature

Viscosity

Explosive properties

Oxidizing properties

Not available.

Not available.

Not available.

Not determined

9.2. Other information

VOC < 169 g/l Estimated

SECTION 10: Stability and reactivity

10.1. Reactivity Not available.

10.2. Chemical stability Stable under recommended storage conditions.

10.3. Possibility of hazardous

reactions

Will not occur.

10.4. Conditions to avoid Not available.

10.5. Incompatible materials Incompatible with strong bases and oxidizing agents.

10.6. Hazardous Upon decomposition, this product may yield gaseous nitrogen oxides, carbon monoxide, carbon

decomposition products dioxide and/or low molecular weight hydrocarbons.

SECTION 11: Toxicological information

General information Not available.

Information on likely routes of exposure

Inhalation Inhalation may result in mild irritation to the respiratory system.

Skin contact Contact with skin may result in mild irritation.

Eye contact Causes serious eye damage.

Ingestion Ingestion is not a likely route of exposure.

Symptoms Not available.

11.1. Information on toxicological effects

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

Components Species Test Results

2-pyrrolidone (CAS 616-45-5)

Acute Oral

LD50 Rat > 5000 mg/kg

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

Non irritant in rabbit (OECD 404)

Serious eye damage/eye

irritation

Causes serious eye damage.

Respiratory sensitizationBased on available data, the classification criteria are not met.Skin sensitizationBased on available data, the classification criteria are not met.Germ cell mutagenicityBased on available data, the classification criteria are not met.CarcinogenicityBased on available data, the classification criteria are not met.

Reproductive toxicity May damage fertility or the unborn child.

2-pyrrolidone: This component showed developmental effects only at high doses that were toxic to pregnant test animals (OECD Testing Guideline 414: Prenatal Developmental Toxicity Study). Uptake by people of small doses is not expected to cause developmental toxicity. This component has not caused adverse effects on sexual function or damage to fertility in an animal study (OECD

Testing Guideline 443: Extended One-Generation Reproductive Toxicity Study).

Specific target organ toxicity -

single exposure

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

Specific target organ toxicity -

repeated exposure

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

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

Material name: C4823Series sps uk

Mixture versus substance

information

Not available.

Other information

Complete toxicity data are not available for this specific formulation

Refer to Section 2 for potential health effects and Section 4 for first aid measures.

SECTION 12: Ecological information

12.1. Toxicity

Aquatic toxicity Static acute toxicity (trout), survival (100 mg/L) = 80%

Static acute toxicity (trout), survival (10 mg/L) = 100%

LC50/96h/rainbow trout => 100 mg/l

EC50/48h/daphnia => 100mg/l, OECD 202 EC50/72h/algae => 100 mg/l, OECD 201

Components **Species Test Results**

2-pyrrolidone (CAS 616-45-5)

Aquatic

EC50 Crustacea Water flea (Daphnia pulex) 13.21 mg/l, 48 hours

succinic acid (CAS 110-15-6)

Aquatic

Fish LC50 Fish 101, 96 Hours

Trimethylolpropane (CAS 77-99-6)

Aquatic

Crustacea EC50 Daphnia 102, 48 Hours Fish LC50 Fish 1000, 96 Hours

12.2. Persistence and

degradability

Not available.

12.3. Bioaccumulative potential Not available.

Partition coefficient n-octanol/water (log Kow)

> -0.85 2-pyrrolidone -0.59 succinic acid

Not available. **Bioconcentration factor (BCF)** 12.4. Mobility in soil Not available

12.5. Results of PBT and vPvB

assessment

Not a PBT or vPvB substance or mixture.

Not available. 12.6. Other adverse effects

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Residual waste Not available. Contaminated packaging Not available. Not available. EU waste code

Do not allow this material to drain into sewers/water supplies. Disposal methods/information

Dispose of waste material according to Local, State, Federal, and Provincial Environmental

Regulations.

HP's Planet Partners (trademark) supplies recycling program enables simple, convenient recycling of HP original inkjet and LaserJet supplies. For more information and to determine if this service

is available in your location, please visit http://www.hp.com/recycle.

SECTION 14: Transport information

DOT

UN number Not available. Not Regulated **UN proper shipping name**

Transport hazard class(es)

Class Not available.

Subsidiary risk

Not available. **Packing group**

Environmental hazards

No Marine pollutant

Special precautions for user Not available.

Material name: C4823Series SDS UK

9458 Version #: 12 Revision date: 23-Mar-2021 Issue date: 28-Jun-2013

IATA

UN number Not available.
UN proper shipping name Not Regulated

Transport hazard class(es)

Class Not available.

Subsidiary risk

Packing group Not available.

Environmental hazards No

Special precautions for user Not available.

IMDG

UN number Not available. **UN proper shipping name** Not Regulated

Transport hazard class(es)

Class Not available.

Subsidiary risk -

Packing group Not available.

Transport hazard class(es)

Marine pollutant No

EmS Not available. Special precautions for user Not available.

ADR

UN number Not available. **UN proper shipping name** Not Regulated

Transport hazard class(es)

Class Not available.

Subsidiary risk

Hazard No. (ADR) Not available.

Tunnel restriction code Not available.

Packing group Not available.

Environmental hazards No

Special precautions for user Not available.

Further information Not a dangerous good under DOT, IATA, ADR, IMDG, or RID.

Transport in bulk according to Annex II of MARPOL73/78 and the IBC code: Not applicable.

SECTION 15: Regulatory information

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

EU regulations

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended

Not listed.

Regulation (EC) No. 850/2004 On persistent organic pollutants, Annex I as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended

Not listed.

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended

Not listed.

Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA

Not listed.

Authorizations

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended

Not listed.

Restrictions on use

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended Not listed.

Material name: C4823Series SDS UK

Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended

Not listed

Other EU regulations

Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended

Not listed.

Other regulations All chemical substances in this HP product have been notified or are exempt from notification

under chemical substances notification laws in the following countries: US (TSCA), EU

(EINECS/ELINCS), Switzerland, Canada (DSL/NDSL), Australia, Japan, Philippines, South Korea,

New Zealand, and China.

Other information This Safety Data Sheet complies with the requirements of Regulation (EU) 2015/830.

Classification according to Regulation (EC) No 1272/2008 as amended.

Specific Provisions: Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC (in the amended version OJ L 396 from 29.05.2007 page 3 with further

rectifications and amendments).

National regulations

Not available.

15.2. Chemical safety assessment

See attached SUMI or GEIS document, if applicable.

SECTION 16: Other information

References

Regulation (EC) No. 1907/2006 of December 18, 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) and establishing a European Chemicals Agency (REACH).

Regulation (EU) 2015/830 of May 28, 2015 amending Regulation (EC) No. 1907/2006.

Regulation (EC) No. 1272/2008 of December 16, 2008 on classification, labeling and packaging of substances and mixtures, and amendments (CLP).

Information on evaluation method leading to the classification of mixture

The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.

Full text of any H-statements not written out in full under Sections 2 to 15

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H315 Causes skin irritation.

H318 Causes serious eye damage. H319 Causes serious eye irritation.

H360 May damage fertility or the unborn child.

H361 Suspected of damaging fertility or the unborn child by skin contact.

H410 Very toxic to aquatic life with long lasting effects.

Revision information

Training information

None.

Follow training instructions when handling this material.

Disclaimer

This Safety Data Sheet document is provided without charge to customers of HP. Data is the most current known to HP at the time of preparation of this document and is believed to be accurate. It should not be construed as guaranteeing specific properties of the products as described or suitability for a particular application. This document was prepared to the requirements of the jurisdiction specified in Section 1 above and may not meet regulatory requirements in other countries.

This safety data sheet is meant to convey information about HP inks (toners) provided in HP Original ink (toner) supplies. If our Safety Data Sheet has been provided to you with a refilled, remanufactured, compatible or other non-HP Original supply please be aware that the information contained herein was not meant to convey information about such products and there could be considerable differences from information in this document and the safety information for the product you purchased. Please contact the seller of the refilled, remanufactured or compatible supplies for applicable information, including information on personal protective equipment, exposure risks and safe handling guidance. HP does not accept refilled, remanufactured or compatible supplies in our recycling programs.

Material name: C4823Series SDS UK

Explanation of abbreviations

ACGIH American Conference of Governmental Industrial Hygienists

CAS Chemical Abstracts Service

CERCLA Comprehensive Environmental Response Compensation and Liability Act

CFR Code of Federal Regulations

COC Cleveland Open Cup

DOT Department of Transportation

EPCRA Emergency Planning and Community Right-to-Know Act (aka SARA)

IARC International Agency for Research on Cancer

NIOSH National Institute for Occupational Safety and Health

NTP National Toxicology Program

OSHA Occupational Safety and Health Administration

PEL Permissible Exposure Limit

RCRA Resource Conservation and Recovery Act

REC Recommended

REL Recommended Exposure Limit

SARA Superfund Amendments and Reauthorization Act of 1986

STEL Short-Term Exposure Limit

TCLP Toxicity Characteristics Leaching Procedure

TLV Threshold Limit Value

TSCA Toxic Substances Control Act
VOC Volatile Organic Compounds

Material name: C4823Series sps uk

Safe Use of Mixture Information (SUMI)

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Water Based Ink: WB01 *English*

Disclaimer

This SUMI is a generic document for communicating conditions of safe use of a product in response to the REACH obligation. This document relates only to conditions of safe use and is not specific to a product. By adding this SUMI to a specific product SDS, the importer/formulator declares that the mixture can safely be used following the instructions below. Following occupational health legislation, the employer of workers remains responsible for communicating relevant use information to employees. When developing workplace instructions for employees, SUMI Sheets should always be considered in combination with the SDS and the label of the product. Derived No Effect Levels (DNEL) and Predicted No Effect Concentration (PNEC) values of substances derived from the Chemical Safety Assessment (CSA) will be given in section 8 of the SDS.

The REACH registration number(s), where applicable, completes an extended product SDS.

Operational conditions	
Maximum duration	Up to 8 hours per day
Frequency of exposure	< 240 days per year
Process conditions	Covers use at ambient temperatures. Adequate ventilation should be provide for the areas where printing is performed. ANSI/ASHRAE Standard 62.1-2013 provides
	guidelines to ensure acceptable air quality in the workspace.
	Avoid direct contact.
	Regular cleaning of equipment and work area.
	Supervision in place to check that Risk Management Measures are in place are being correctly used and Operational Conditions
	followed.
Risk management measures	
Conditions and measures	Wear safety glasses with side shields (or goggles), if splashing is possible.

Conditions and measures related to Personal Protection Equipment, hygiene and health evaluation

Wear appropriate chemical resistent gloves: see section 8 of the SDS.

Wear appropriate chemical resistent clothing.

In case of inadequate ventilation wear respiratory protection.

Eye wash fountain and emergency showers are recommended.

Avoid breathing mist/vapours.

Avoid contact with skin, eyes and clothing.

Training of workers in relation to proper use and maintenance of all Personal protection equipment (PPE) must be ensured.









Good practice advice

Use personal protective equipment as required.

Wash hands before breaks and after work.

Keep good industrial hygiene and safety practice.

Use only with adequate ventilation.

Do no eat, drink or smoke when using this product.

Wash contaminated clothing before reuse.

Store at room temperature.





Environmental measures

Do not allow this material to drain into sewers/water supplies.

Dispose of waste material according to Local, State, Federal and Provincial Environmental Regulations.

Ensure collection and disposal with appropriately licenced waste contractor.

Use descriptors

IS-Use at industrial sites

PW-Widespread use by professional workers

SU7-Printing and reproduction media

PC18-Inks and Toners

PROC1-Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions.

PROC2-Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions

PROC3- Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition

PROC8a-Transfer of substance or mixture (charging and discharging) at non-dedicated facilities

PROC8b-Transfer of substance or mixture (charging and discharging) at dedicated facilities

ERC5-Use at industrial site leading to inclusion into/onto article

ERC8c-Widespread use leading to inclusion into/onto article (indoor)

Additional information on product composition

In section 2 of the SDS as well as on the label, the classification of the mixture is provided.

Most of the water based inks are "not classified".

The classification of the mixture is based on the individuel ingredients and their concentration within the mixture.

All ingredients contributing to the classification are stated in Section 3 of the SDS.

Relevant limit values of ingredients on which the exposure assessment is based, are listed in section 8 of the SDS.

The product may contain sensitizing ingredients that may cause allergic reaction to certain people.

Section 2 of the SDS states these ingredients where applicable.