

1. IDENTIFICATION
Product identifier
Mixture identification:
Trade name: High Capacity Black Ink Pack, R02L1
Recommended use of the chemical and restrictions on use
Recommended use:
Ink for inkjet printing
Details of the supplier of the safety data sheet
Company:
EPSON AMERICA Inc.
3840 Kilroy Airport Way
Long Beach, CA 90806
United States
Telephone : 562.276.1369
Emergency phone number
Telephone : 562.276.1369
2. HAZARD(S) IDENTIFICATION
Classification of the chemical
The product is not classified as dangerous according to OSHA Hazard Communication
Standard (29 CFR 1910.1200).
Label elements
The product is not classified as dangerous according to OSHA Hazard Communication
Standard (29 CFR 1910.1200).

Hazard pictograms:

None

Hazard statements:

None Precautionary statements:

None

Special Provisions:

None

Hazards not otherwise classified identified during the classification process:

None

Additional classification information

NFPA rating:





**3. COMPOSITION/INFORMATION ON INGREDIENTS** 

Substances No

Mixtures

Hazardous components within the meaning of 29 CFR 1910.1200 and related classification:

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Qty	Name	Ident. Numb	er	Classification
65% ~ 80%	Water	CAS: EC:	7732-18-5 231-791-2	The product is not classified as dangerous according to OSHA Hazard Communication Standard (29 CFR 1910.1200).
5% ~ 7%	Carbon black	CAS: EC:	1333-86-4 215-609-9	The product is not classified as dangerous according to OSHA Hazard Communication Standard (29 CFR 1910.1200).
5% ~ 7%	Glycerol	CAS: EC:	56-81-5 200-289-5	The product is not classified as dangerous according to OSHA Hazard Communication Standard (29 CFR 1910.1200).
3% ~ 5%	2-[2-(2-butoxyethoxy)et hoxy]ethanol; TEGBE; triethylene glycol monobutyl ether	CAS: EC:	603-183-00-0 143-22-6 205-592-6 01-21194751 07-38	✤ A.3/1 Eye Dam. 1 H318
0.5% ~ 1%	Triethanol amine	CAS: EC:	102-71-6 203-049-8	The product is not classified as dangerous according to OSHA Hazard Communication Standard (29 CFR 1910.1200).

# **4. FIRST-AID MEASURES**

Description of necessary measures

In case of skin contact:

Wash with plenty of water and soap.

In case of eyes contact:

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

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

In case of Inhalation:

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

Most important symptoms/effects, acute and delayed

None

Indication of immediate medical attention and special treatment needed Treatment:

None

# **5. FIRE-FIGHTING MEASURES**

Suitable extinguishing media: Water. Carbon dioxide (CO2). Unsuitable extinguishing media: None in particular. Specific hazards arising from the chemical Do not inhale explosion and combustion gases. Burning produces heavy smoke. Hazardous combustion products: None Explosive properties: No data available Oxidizing properties: No data available

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Special protective equipment and precautions for fire-fighters

Use suitable breathing apparatus .

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

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

### 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures

Wear personal protection equipment.

Remove all sources of ignition.

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

Provide adequate ventilation.

Remove persons to safety.

Use appropriate respiratory protection.

See protective measures under point 7 and 8.

Methods and materials for containment and cleaning up

Wash with plenty of water.

### 7. HANDLING AND STORAGE

Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.
Do not use on extensive surface areas in premises where there are occupants.
Do not eat or drink while working.
See also section 8 for recommended protective equipment.

Conditions for safe storage, including any incompatibilities

Keep away from food, drink and feed.
Incompatible materials:
None in particular.
Instructions as regards storage premises:
Adequately ventilated premises.
Storage temperature:
Store at ambient temperature.

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters Carbon black - CAS: 1333-86-4 - OEL Type: ACGIH - LTE(8h): 3 mg/m3 - OEL Type: OSHA - LTE: 3.5 mg/m3 Glycerol - CAS: 56-81-5 - OEL Type: OSHA - LTE: 5 mg/m3 - OEL Type: OSHA - LTE: 15 mg/m3 **DNEL Exposure Limit Values** No data available **PNEC Exposure Limit Values** 2-[2-(2-butoxyethoxy)ethoxy]ethanol; TEGBE; triethylene glycol monobutyl ether - CAS: 143-22-6 Target: Fresh Water - Value: 1.5 mg/l Target: Freshwater sediments - Value: 5.77 mg/kg Target: Marine water - Value: 0.15 mg/l Target: Marine water sediments - Value: 0.13 mg/kg Target: Microorganisms in sewage treatments - Value: 200 mg/l Appropriate engineering controls: None Individual protection measures Eye protection:

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Not needed for normal use. Anyway, operate according good working practices. Protection for skin: No special precaution must be adopted for normal use. Protection for hands: Not needed for normal use. Respiratory protection: Not needed for normal use. Thermal Hazards: None

### 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and colour:	Black Liquid
Odour:	Slightly
Odour threshold:	No data available
pH:	8.4 ~ 9.4
Melting point / freezing point:	No data available
Initial boiling point and boiling range:	No data available
Flash point:	No data available
Evaporation rate:	No data available
Solid/gas flammability:	No data available
Upper/lower flammability or explosive limits:	No data available
Vapour pressure:	No data available
Vapour density:	No data available
Relative density:	No data available
Solubility in water:	Complete
Solubility in oil:	No data available
Partition coefficient (n-octanol/water):	No data available
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
Viscosity:	No data available
Miscibility:	No data available
Fat Solubility:	No data available
Conductivity:	No data available

# **10. STABILITY AND REACTIVITY**

Reactivity Stable under normal conditions Chemical stability Stable under normal conditions Possibility of hazardous reactions None Conditions to avoid Stable under normal conditions. Incompatible materials None in particular. Hazardous decomposition products None.

# **11. TOXICOLOGICAL INFORMATION**

Toxicological information of the mixture: No data available Toxicological information of the main substances found in the mixture: Carbon black - CAS: 1333-86-4 a) acute toxicity:



Test: LD50 - Route: Dermal - Species: Rabbit > 3 g/kg - Source: Acute Toxicity Data. Journal of the American College of Toxicology, Part B. Vol. 15

Test: LD50 - Route: Oral - Species: Rat > 15400 mg/kg - Source: Acute Toxicity Data. Journal of the American College of Toxicology, Part B. Vol. 15

Glycerol - CAS: 56-81-5

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Guinea pig = 7750 mg/kg - Source: Journal of Industrial Hygiene and Toxicology. Vol. 23, Pg. 259, 1941

Test: LDLo - Route: Oral - Species: Human = 1428 mg/kg - Source: "Toxicology of Drugs and Chemicals," Deichmann, W.B., New York, Academic Press, Inc., 1969Vol. -, Pg. 288, 1969.

2-[2-(2-butoxyethoxy)ethoxy]ethanol; TEGBE; triethylene glycol monobutyl ether - CAS: 143-22-6

a) acute toxicity:

Test: LD50 - Route: Dermal - Species: Rabbit = 3.54 ml/kg - Source: American Industrial Hygiene Association Journal. Vol. 23, Pg. 95, 1962.

Test: LD50 - Route: Oral - Species: Rat = 5300 mg/kg - Source: Office of Toxic Substances Report. Vol. OTS,

Triethanol amine - CAS: 102-71-6

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Guinea pig = 2200 mg/kg - Source: "Toxicometric Parameters of Industrial Toxic Chemicals Under Single Exposure," Izmerov, N.F., et al., Moscow, Centre of International Projects, GKNT, 1982Vol. -, Pg. 114, 1982. Test: LD50 - Route: Oral - Species: Mouse = 5846 mg/kg - Source: Science Reports of the Research Institutes, Tohoku University, Series C: Medicine. Vol. 36(1-4), Pg. 10, 1989.

Carbon black - CAS: 1333-86-4

With excessive exposure, carbon black has been listed as a possible human carcinogen. However, as engineered within this ink cartridge, emissions to air of carbon black during normal printing use have not been found. IARC, the International Agency for Research on Cancer, has found printing inks to be not classifiable as human carcinogens.

Substance(s) listed on the NTP report on Carcinogens:

#### None.

Substance(s) listed on the IARC Monographs:

Carbon black - Group 2B

Triethanol amine - Group 3.

Substance(s) listed as OSHA Carcinogen(s): None.

INONE.

Substance(s) listed as NIOSH Carcinogen(s): None.

# **12. ECOLOGICAL INFORMATION**

Ecotoxicity

Adopt good working practices, so that the product is not released into the environment. No data available Persistence and degradability No data available Bioaccumulative potential No data available Mobility in soil No data available Other adverse effects None

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# **13. DISPOSAL CONSIDERATIONS**

Waste treatment and disposal methods

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

# **14. TRANSPORT INFORMATION**

UN number Not classified as dangerous in the meaning of transport regulations. UN proper shipping name No data available Transport hazard class(es) No data available Packing group No data available Environmental hazards No data available Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code) No data available Special precautions No data available

# **15. REGULATORY INFORMATION**

USA - Federal regulations

TSCA - Toxic Substances Control Act

TSCA inventory: all the components are listed on the TSCA inventory. TSCA listed substances:

- Isothiazolinone derivatives is listed in TSCA §5(a) Proposed SNUR.
- SARA Superfund Amendments and Reauthorization Act

Section 302 – Extremely Hazardous Substances: no substances listed.

Section 304 - Hazardous substances: no substances listed.

Section 313 – Toxic chemical list: 2-[2-(2-butoxyethoxy)ethoxy]ethanol; TEGBE; triethylene glycol monobutyl ether.

CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act Substance(s) listed under CERCLA: 2-[2-(2-butoxyethoxy)ethoxy]ethanol; TEGBE; triethylene glycol monobutyl ether.

### CAA - Clean Air Act CAA listed substances: Glycerol is listed in CAA Section 111 2-[2-(2-butoxyethoxy)ethoxy]ethanol; TEGBE; triethylene glycol monobutyl ether is listed in CAA Section 112, Section 112(b) - HON.

CWA - Clean Water Act CWA listed substances: None.

USA - State specific regulations

California Proposition 65
Substance(s) listed under California Proposition 65:
None.
Massachusetts Right to know
Substance(s) listed under Massachusetts Right to know:
Carbon black.
New Jersey Right to know
Substance(s) listed under New Jersey Right to know:
Carbon black
2-[2-(2-butoxyethoxy)ethoxy]ethanol; TEGBE; triethylene glycol monobutyl ether.



Pennsylvania Right to know

Substance(s) listed under Pennsylvania Right to know:

Carbon black

2-[2-(2-butoxyethoxy)ethoxy]ethanol; TEGBE; triethylene glycol monobutyl ether.

# **16. OTHER INFORMATION**

Full text of phrases referred to in Section 3: H318 Causes serious eye damage.

Safety Data Sheet dated September 12, 2017, Revision: 1.0 Disclaimer: The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality. The information relates only to the specific material and may not be valid for such material used in combination with any other material or in any process.

This Safety Data Sheet cancels and replaces any preceding release.

ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road.
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
CLP:	Classification, Labeling, Packaging.
DNEL:	Derived No Effect Level.
EINECS:	European Inventory of Existing Commercial Chemical Substances.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
HMIS:	Hazardous Materials Identification System
IARC:	International Agency for Research on Cancer
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization"
	(ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
LTE:	Long-term exposure.
NFPA:	National Fire Protection Association
NIOSH:	National Institute for Occupational Safety and Health
NTP:	National Toxicology Program
OSHA:	Occupational Safety and Health Administration
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STE:	Short-term exposure.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWATLV:	Threshold Limit Value for the Time Weighted Average 8 hour day.
	(ACGIH Standard).