

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Product form : Mixture
Product name : ARR JET NOVA 250R 10L INK TANKS BLK

1.2. Relevant identified uses of the substance or mixture and uses advised**against 1.2.1. Relevant identified uses**

Use of the substance/mixture : Inkjet Ink

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet**Supplier of the SDS**

Katun Corporation
7760 France Avenue South., Suite 340
Minneapolis, MN 55435
T 952-941-9505
www.katun.com

1.4. Emergency telephone number

Emergency number

For Hazardous Materials Incidents (spill, leak, fire, exposure, or accident) call: CHEMTREC: 1-800-424-9300

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture**

Classification according to Regulation (EC) No. 1272/2008 [CLP] Mixtures/Substances: SDS EU 2015: According to Regulation (EU) 2015/830 (REACH Annex II)

Not classified

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

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

EUH phrases : EUH208 - Contains 1,2-benzisothiazolone(2634-33-5). May produce an allergic reaction.

2.3. Other hazards

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

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

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]
Water	(CAS-No.) 7732-18-5 (EC-No.) 231-791-2	70 - 75	Not classified
Triethylene glycol	(CAS-No.) 112-27-6 (EC-No.) 203-953-2	10	Not classified

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Carbon black	(CAS-No.) 1333-86-4 (EC-No.) 215-609-9	5	Carc. 2, H351
Butyldiglycol	(CAS-No.) 112-34-5 (EC-No.) 203-961-6 (EC Index-No.) 603-096-00-8	4	Eye Irrit. 2, H319
Glycerol	(CAS-No.) 56-81-5 (EC-No.) 200-289-5	4	Not classified
1,2-benzisothiazolone	(CAS-No.) 2634-33-5 (EC-No.) 220-120-9 (EC Index-No.) 613-088-00-6	0.03	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400

Specific concentration limits:

Name	Product identifier	Specific concentration limits
1,2-benzisothiazolone	(CAS-No.) 2634-33-5 (EC-No.) 220-120-9 (EC Index-No.) 613-088-00-6	(C >= 0.05) Skin Sens. 1, H317

Full text of H-phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation	: If inhaled and if breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
First-aid measures after skin contact	: Gently wash with plenty of soap and water.
First-aid measures after eye contact	: If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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

Symptoms/effects after inhalation	: None under normal use.
Symptoms/effects after skin contact	: May cause slight irritation.
Symptoms/effects after eye contact	: None under normal conditions.
Symptoms/effects after ingestion	: None under normal use.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Use extinguishing media appropriate for surrounding fire.
Unsuitable extinguishing media	: None known.

5.2. Special hazards arising from the substance or mixture

Fire hazard	: No particular fire or explosion hazard.
Explosion hazard	: Product is not explosive.

5.3. Advice for firefighters

Firefighting instructions	: Exercise caution when fighting any chemical fire. Use extinguishing media appropriate for surrounding fire.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection. Wear fire/flame resistant/retardant clothing. Wear a self contained breathing apparatus. EN469.

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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Take up small spills with dry chemical absorbent.

6.1.2. For emergency responders

Emergency procedures : Take up small spills with dry chemical absorbent.

6.2. Environmental precautions

Do not discharge into drains or the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Small quantities of liquid spill: take up in non-combustible absorbent material and shovel into container for disposal.

6.4. Reference to other sections

Section 7: safe handling. Section 8: personal protective equipment. Section 13: disposal information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid contact with skin, eyes and clothing.

Hygiene measures : Wash hands, forearms and face thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in original container.

Incompatible products : None known.

7.3. Specific end use(s)

Inkjet printing.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Carbon black (1333-86-4)		
USA - ACGIH	Local name	Carbon black
USA - ACGIH	ACGIH TWA (mg/m³)	3 mg/m³
USA - ACGIH	Remark (ACGIH)	Bronchitis
USA - NIOSH	NIOSH REL (TWA) (mg/m³)	3.5 mg/m³
USA - NIOSH	NIOSH REL (STEL) (mg/m³)	0.1 mg/m³
USA - OSHA	Local name	Carbon black
USA - OSHA	OSHA PEL (TWA) (mg/m³)	3.5 mg/m³

Butyldiglycol (112-34-5)		
USA - ACGIH	Local name	Diethylene glycol monobutyl ether
USA - ACGIH	ACGIH TWA (ppm)	10 ppm

8.2. Exposure controls

Appropriate engineering controls:

No special work practices are needed beyond the above recommendations under anticipated conditions of normal use.

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Hand protection:
nitrile rubber gloves. EN374
Eye protection:
None under normal use
Respiratory protection:
None under normal use

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Black. liquid.
Color	: Black.
Odor	: odorless.
Odor threshold	: No data available
pH	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: No data available
Relative vapor density at 20 °C	: > 1
Relative density	: No data available
Solubility	: Soluble in water.
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known.

10.2. Chemical stability

The product is stable at normal handling and storage conditions.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

None known.

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10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

No additional information available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Carbon black (1333-86-4)

LD50 oral rat	> 8000 mg/kg
LC50 inhalation rat (mg/l)	> 4.6 mg/m ³ 4 h

Butyldiglycol (112-34-5)

LD50 oral rat	4500 mg/kg
LD50 dermal rabbit	2764 mg/kg

Water (7732-18-5)

LD50 oral rat	> 5000 mg/kg body weight
LD50 dermal rabbit	> 5000 mg/kg
LC50 inhalation rat (mg/l)	> 6 mg/l/4h
LC50 inhalation rat (Dust/Mist - mg/l/4h)	> 6 mg/l/4h

Skin corrosion/irritation : Not classified (Based on available data, the classification criteria are not met)
Serious eye damage/irritation : Not classified (Based on available data, the classification criteria are not met)
Respiratory or skin sensitization : Not classified (Based on available data, the classification criteria are not met)
Germ cell mutagenicity : Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity : Not classified (The chemicals used are not available in the physical form known to cause cancer.)

Carbon black (1333-86-4)

IARC group	2B - Possibly carcinogenic to humans, Inhalation of dust
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Reproductive toxicity : Not classified (Based on available data, the classification criteria are not met)
Specific target organ toxicity – single exposure : Not classified (Based on available data, the classification criteria are not met)
Specific target organ toxicity – repeated exposure : Not classified (Based on available data, the classification criteria are not met)
Aspiration hazard : Not classified (Based on available data, the classification criteria are not met)

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Avoid undiluted product to come into sewer or surface water.
Aquatic acute : Not classified
Aquatic chronic : Not classified

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Butyldiglycol (112-34-5)

LC50 fish 1	1300 mg/l 96 h <i>Lepomis macrochirus</i>
EC50 <i>Daphnia</i> 1	> 100 mg/l 48 h

12.2. Persistence and degradability

Persistence and degradability	Not established.
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Carbon black (1333-86-4)

Persistence and degradability	Not readily biodegradable.
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12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

Ecology - soil	No additional information available.
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12.5. Results of PBT and vPvB assessment

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

12.6. Other adverse effects

Additional information : Do not discharge into drains or the environment

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Do not dispose in household garbage. Dispose in a safe manner in accordance with local/national regulations.

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

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

14.1. UN number

UN-No. (ADR) : Not regulated.

UN-No. (IMDG) : Not regulated.

UN-No. (IATA) : Not regulated.

UN-No. (ADN) : Not regulated.

UN-No. (RID) : Not regulated.

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.

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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.

14.5. Environmental hazards

Dangerous for the environment : No

Marine pollutant : No

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. Transport in bulk according to Annex II of Marpol and the IBC Code

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

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:

55. 2-(2-butoxyethoxy)ethanol (DEGBE)

Butyldiglycol

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3. Liquid substances or mixtures which are regarded as dangerous in accordance with Directive 1999/45/EC or are fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008	Butyldiglycol
3(b) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10	Butyldiglycol - Reaction product of 1-octanol with epichlorohydrin and 2-mercaptoethanol

Contains no REACH candidate substance
Contains no REACH Annex XIV substances.
Directive 2012/18/EU (SEVESO III)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acronyms:	
	ACGIH (American Conference of Government Industrial Hygienists)
	ATE Acute Toxicity Estimate
	CAS (Chemical Abstracts Service) number
	CLP: Classification, Labelling, Packaging.
	EC50: Environmental Concentration associated with a response by 50% of the test population.
	GHS: Globally Harmonized System (of Classification and Labeling of Chemicals).
	LD50: Lethal Dose for 50% of the test population
	TWA: Time Weighted Average

Data sources : ACGIH (American Conference of Government Industrial Hygienists).
European Chemicals Agency (ECHA) C&L Inventory database. Accessed at <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>.
National Fire Protection Association; Fire Protection Guide to Hazardous Materials; 10th edition.
Krister Forsberg and S.Z. Mansdorf, "Quick Selection Guide to Chemical Protective Clothing", Fifth Edition.
Manufacturer Information.
US National Library of Medicine National Institutes of Health Haz-Map. Accessed at <http://hazmap.nlm.nih.gov>.

Full text of H- and EUH-phrases:	
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Carc. 2	Carcinogenicity Category 2
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Eye Irrit. 2	Serious eye damage/eye irritation Category 2
Ox. Sol. 3	Oxidizing solids Category 3
Skin Irrit. 2	Skin corrosion/irritation Category 2
Skin Sens. 1	Skin sensitization, Category 1
H272	May intensify fire; oxidizer

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H302	Harmful if swallowed
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H319	Causes serious eye irritation
H351	Suspected of causing cancer
H400	Very toxic to aquatic life
EUH208	Contains 1,2-benzisothiazolone(2634-33-5). May produce an allergic reaction

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