



SAFETY DATA SHEET IR-236BKA PRINTING INK

According to Appendix D, OSHA Hazard Communication Standard 29 CFR §1910.1200

1. Identification

Product identifier

Product name IR-236BKA PRINTING INK

Product number IR-236BKA

Recommended use of the chemical and restrictions on use

Application Printing ink.

Details of the supplier of the safety data sheet

Supplier Domino Amjet Inc
1290 Lakeside Drive
Gurnee, Illinois 60031
Tel: +1 847 244 2501
Fax: +1 847 244 1421
Email: msds@domino-uk.com

Emergency telephone number

Emergency telephone For MEDICAL emergencies call: International Poison Control Center, USA
1-800-228-5635 (24 Hours) / +1 612-851-8180 (24 hours, International)
For TRANSPORTATION emergencies call:
CHEMTREC 1-800-424-9300 (US Calls) / +1 703-527-3887 (International calls)

National emergency telephone 911
number

2. Hazard(s) Identification

Classification of the substance or mixture

Physical hazards Flam. Liq. 2 - H225

Health hazards Eye Irrit. 2A - H319 STOT SE 3 - H336

Environmental hazards Aquatic Chronic 3 - H412

Human health See Section 11 for additional information on health hazards.

Environmental The product contains a substance which may cause long-term adverse effects in the aquatic environment.

Physicochemical Vapors are heavier than air and may travel along the floor and accumulate in the bottom of containers.

Label elements

Pictogram



IR-236BKA PRINTING INK

Signal word	Danger
Hazard statements	H225 Highly flammable liquid and vapor. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness. H412 Harmful to aquatic life with long lasting effects.
Precautionary statements	P210 Keep away from heat, sparks, open flames and hot surfaces. No smoking. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P304+P340 If inhaled: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P405 Store locked up. P501 Dispose of contents/ container in accordance with national regulations.
Contains	BUTANONE

Other hazards

This product does not contain any substances classified as PBT or vPvB.

3. Composition/Information on Ingredients**Mixtures**

BUTANONE	50-70%
CAS number: 78-93-3	
Classification Flam. Liq. 2 - H225 Eye Irrit. 2A - H319 STOT SE 3 - H336	
ETHANOL	10-30%
CAS number: 64-17-5	
Classification Flam. Liq. 2 - H225	
C.I. SOLVENT BLACK 29	5-9.9%
CAS number: 61901-87-9	
Classification Aquatic Chronic 2 - H411	
2-METHYLPROPAN-2-OL	<0.1%
CAS number: 75-65-0	
Classification Flam. Liq. 2 - H225 Acute Tox. 4 - H332 Eye Irrit. 2A - H319 STOT SE 3 - H335	

The full text for all hazard statements is displayed in Section 16.

IR-236BKA PRINTING INK

Composition comments The product contains organic solvents.

4. First-aid measures**Description of first aid measures**

General Information	Keep affected person away from heat, sparks and flames.
Inhalation	Move affected person to fresh air at once. If breathing stops, provide artificial respiration. Keep affected person warm and at rest. Get medical attention immediately.
Ingestion	Never give anything by mouth to an unconscious person. Do not induce vomiting. Do not induce vomiting. Get medical attention immediately.
Skin Contact	Remove affected person from source of contamination. Wash skin thoroughly with soap and water. Get medical attention if any discomfort continues.
Eye contact	Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Continue to rinse for at least 15 minutes. Get medical attention immediately.

Most important symptoms and effects, both acute and delayed

General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	Vapors may cause headache, fatigue, dizziness and nausea.
Ingestion	May cause nausea, headache, dizziness and intoxication.
Skin contact	Prolonged contact may cause redness, irritation and dry skin.
Eye contact	May cause severe eye irritation.

Indication of immediate medical attention and special treatment needed

Notes for the doctor	No specific recommendations. If in doubt, get medical attention promptly.
-----------------------------	---

5. Fire-fighting measures**Extinguishing media**

Suitable extinguishing media	Extinguish with alcohol-resistant foam, carbon dioxide or dry powder. Water spray.
-------------------------------------	--

Special hazards arising from the substance or mixture

Specific hazards	Flammable liquid and vapour. Vapors may be ignited by a spark, a hot surface or an ember. Vapors may form explosive mixtures with air. Containers can burst violently or explode when heated, due to excessive pressure build-up. Take precautionary measures against static discharges.
Hazardous combustion products	Thermal decomposition or combustion products may include the following substances: Toxic gases or vapors. Carbon dioxide (CO ₂). Carbon monoxide (CO).

Advice for firefighters

Protective actions during firefighting	Control run-off water by containing and keeping it out of sewers and watercourses. If risk of water pollution occurs, notify appropriate authorities. Use water to keep fire exposed containers cool and disperse vapors. Move containers from fire area if it can be done without risk.
---	--

6. Accidental release measures**Personal precautions, protective equipment and emergency procedures**

Personal precautions	Wear protective clothing as described in Section 8 of this safety data sheet.
-----------------------------	---

Environmental precautions

IR-236BKA PRINTING INK

Environmental precautions Do not discharge into drains or watercourses or onto the ground.

Methods and material for containment and cleaning up

Methods for cleaning up Eliminate all sources of ignition. No smoking, sparks, flames or other sources of ignition near spillage. Provide adequate ventilation. Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Avoid the spillage or runoff entering drains, sewers or watercourses. Small Spillages: Absorb spillage with non-combustible, absorbent material. Collect and place in suitable waste disposal containers and seal securely. Large Spillages: Absorb in vermiculite, dry sand or earth and place into containers. Dispose of waste via a licensed waste disposal contractor. Inform authorities if large amounts are involved.

Reference to other sections Wear protective clothing as described in Section 8 of this safety data sheet. See Section 11 for additional information on health hazards. For waste disposal, see Section 13.

7. Handling and storage

Precautions for safe handling

Usage precautions Keep away from heat, sparks and open flame. Avoid spilling. Avoid contact with skin and eyes. Provide adequate ventilation. Avoid inhalation of vapors. Use approved respirator if air contamination is above an acceptable level. Vapors may accumulate on the floor and in low-lying areas. Static electricity and formation of sparks must be prevented.

Conditions for safe storage, including any incompatibilities

Storage precautions Keep away from oxidizing materials, heat and flames. Store in tightly-closed, original container in a dry, cool and well-ventilated place. Keep only in the original container.

Storage class Flammable liquid storage.

Specific end uses(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.

8. Exposure Controls/personal protection

Control parameters

Occupational exposure limits

Exposure limits

BUTANONE

Long-term exposure limit (8-hour TWA): OSHA 200 ppm 590 mg/m³

Long-term exposure limit (8-hour TWA): ACGIH 200 ppm 590 mg/m³

Short-term exposure limit (15-minute): ACGIH 300 ppm 885 mg/m³

ETHANOL

Long-term exposure limit (8-hour TWA): OSHA 1000 ppm 1900 mg/m³

Short-term exposure limit (15-minute): ACGIH 1000 ppm 1880 mg/m³

A3

2-METHYLPROPAN-2-OL

Long-term exposure limit (8-hour TWA): OSHA 100 ppm 300 mg/m³

Long-term exposure limit (8-hour TWA): ACGIH 100 ppm 303 mg/m³

A4

OSHA = Occupational Safety and Health Administration.

ACGIH = American Conference of Governmental Industrial Hygienists.

A3 = Confirmed Animal Carcinogen with Unknown Relevance to Humans.

A4 = Not Classifiable as a Human Carcinogen.

Exposure controls

IR-236BKA PRINTING INK

Protective equipment



Appropriate engineering controls

All handling should only take place in well-ventilated areas. As this product contains ingredients with exposure limits, process enclosures, local exhaust ventilation or other engineering controls should be used to keep worker exposure below any statutory or recommended limits, if use generates dust, fumes, gas, vapor or mist.

Eye/face protection

Wear chemical splash goggles.

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. It should be noted that liquid may penetrate the gloves. Frequent changes are recommended.

Other skin and body protection

Wear appropriate clothing to prevent any possibility of skin contact.

Hygiene measures

Use engineering controls to reduce air contamination to permissible exposure level. Provide eyewash station. Do not smoke in work area. Wash promptly if skin becomes contaminated. When using do not eat, drink or smoke. Wash after use and before eating, smoking and using the toilet. Promptly remove any clothing that becomes wet or contaminated. Use appropriate hand lotion to prevent defatting and cracking of skin.

Respiratory protection

No specific recommendations. Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit.

Environmental exposure controls

Keep container tightly sealed when not in use.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Appearance	Liquid.
Color	Black.
Odor	Ketonic.
Odor threshold	Not available.
pH	Not applicable.
Melting point	-86°C Information given is applicable to the major ingredient.
Initial boiling point and range	~79.6°C @ 1013 hPa Information given is applicable to the major ingredient.
Flash point	-6°C Closed cup.
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	Lower flammable/explosive limit: 1.8 % Upper flammable/explosive limit: 11.5 % Information given is applicable to the major ingredient.
Vapor pressure	105 hPa @ 20°C 126 hPa @ 25°C Information given is applicable to the major ingredient.
Vapor density	>1
Relative density	0.856-0.866 @ 25°C
Solubility(ies)	Slightly soluble in water. Soluble in the following materials: Organic solvents.

IR-236BKA PRINTING INK

Partition coefficient	Not available.
Auto-ignition temperature	404°C Information given is applicable to the major ingredient.
Decomposition Temperature	Not available.
Viscosity	3.75-4.25 cP @ 25°C
Other Information	Not determined.
Molecular weight	Not available.
Volatility	80
Volatile organic compound	This product contains a maximum VOC content of 642 g/litre.

10. Stability and reactivity

Reactivity	There are no known reactivity hazards associated with this product.
Stability	Stable at normal ambient temperatures.
Possibility of hazardous reactions	Not available.
Conditions to avoid	Avoid contact with strong oxidizing agents.
Materials to avoid	Strong oxidizing agents.
Hazardous decomposition products	Decomposition at ambient temperatures may generate the following substances: Toxic gases or vapors. Carbon monoxide (CO). Carbon dioxide (CO ₂).

11. Toxicological InformationInformation on toxicological effectsAcute toxicity - oral

Notes (oral LD₅₀) Not available.

Acute toxicity - dermal

Notes (dermal LD₅₀) Not available.

Acute toxicity - inhalation

Notes (inhalation LC₅₀) Not available.

Respiratory sensitization

Respiratory sensitization Not available.

Germ cell mutagenicity

Genotoxicity - in vitro Not available.

Carcinogenicity

Carcinogenicity Not available.

Reproductive toxicity

Reproductive toxicity - fertility Not available.

Reproductive toxicity - development Not available.

Specific target organ toxicity - single exposure

IR-236BKA PRINTING INK

STOT - single exposure Not available.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Not available.

Aspiration hazard

Aspiration hazard Not anticipated to present an aspiration hazard, based on chemical structure.

Inhalation Vapors may cause headache, fatigue, dizziness and nausea.

Ingestion May cause nausea, headache, dizziness and intoxication.

Skin Contact Product has a defatting effect on skin. May cause allergic contact eczema.

Eye contact Irritating to eyes.

Route of exposure Ingestion. Skin absorption Inhalation

Medical Symptoms Drowsiness, dizziness, disorientation, vertigo. Intoxication. Symptoms following overexposure to dust may include the following: Irritability. Headache. Nausea, vomiting.

12. Ecological Information

Ecotoxicity Dangerous for the environment. May cause long-term adverse effects in the aquatic environment.

Toxicity Avoid discharge to the aquatic environment.

Persistence and degradability

Persistence and degradability There are no data on the degradability of this product.

Bioaccumulative potential

Bio-Accumulative Potential No data available on bioaccumulation.

Partition coefficient Not available.

Mobility in soil

Mobility The product contains volatile organic compounds (VOCs) which will evaporate easily from all surfaces.

Other adverse effects

Other adverse effects Not determined.

13. Disposal considerations

Waste treatment methods

General information Waste is classified as hazardous waste.

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

14. Transport Information

UN Number

UN No. (TDG) 1210

UN No. (IMDG) 1210

UN No. (ICAO) 1210

IR-236BKA PRINTING INK

UN No. (DOT) 1210

UN proper shipping name

Proper shipping name (TDG) PRINTING INK

Proper shipping name (IMDG) PRINTING INK, FLAMMABLE OR PRINTING INK RELATED MATERIAL (INCLUDING PRINTING INK THINNING OR REDUCING COMPOUND), FLAMMABLE

Proper shipping name (ICAO) PRINTING INK, FLAMMABLE OR PRINTING INK RELATED MATERIAL (INCLUDING PRINTING INK THINNING OR REDUCING COMPOUND), FLAMMABLE

Proper shipping name (DOT) PRINTING INK

Transport hazard class(es)

TDG class 3

TDG label(s) 3

IMDG Class 3

ICAO class/division 3

Transport labels**Packing group**

TDG Packing Group II

IMDG packing group II

ICAO packing group II

DOT packing group II

Environmental hazards

Environmentally Hazardous Substance

No.

Special precautions for user

EmS F-E, S-D

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

15. Regulatory information**Regulatory Status**

This product is formulated with a Chromium Complex dyestuff. Trace amounts of Chromium VI and its compounds may be found at levels <10ppm (0.001%). Chromium VI ions are not intentionally introduced to this product, but may be present as an integral component of the dyestuff. Chromium VI is a chemical listed on California Prop. 65.

Regulatory References

29CFR 1910.1200 Federal Regulations (OSHA Standard)

US Federal Regulations

SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities

None of the ingredients are listed.

IR-236BKA PRINTING INK

CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)

The following ingredients are listed:

BUTANONE

Final CERCLA RQ: 5000(2270) pounds (Kilograms)

SARA Extremely Hazardous Substances EPCRA Reportable Quantities

None of the ingredients are listed.

SARA 313 Emission Reporting

The following ingredients are listed:

2-METHYLPROPAN-2-OL

<0.1%

BUTANONE

50-70%

CAA Accidental Release Prevention

None of the ingredients are listed.

FDA - Essential Chemical

None of the ingredients are listed.

FDA - Precursor Chemical

None of the ingredients are listed.

SARA (311/312) Hazard Categories

None of the ingredients are listed or exempt.

OSHA Highly Hazardous Chemicals

None of the ingredients are listed.

US State Regulations

California Proposition 65 Carcinogens and Reproductive Toxins

None of the ingredients are listed.

California Air Toxics "Hot Spots" (A-I)

None of the ingredients are listed.

California Air Toxics "Hot Spots" (A-II)

None of the ingredients are listed.

California Directors List of Hazardous Substances

None of the ingredients are listed.

Massachusetts "Right To Know" List

The following ingredients are listed:

ETHANOL

2-METHYLPROPAN-2-OL

BUTANONE

Rhode Island "Right To Know" List

The following ingredients are listed:

ETHANOL

2-METHYLPROPAN-2-OL

IR-236BKA PRINTING INK**BUTANONE****Minnesota "Right To Know" List**

The following ingredients are listed:

ETHANOL

2-METHYLPROPAN-2-OL

BUTANONE

New Jersey "Right To Know" List

The following ingredients are listed:

ETHANOL

2-METHYLPROPAN-2-OL

BUTANONE

Pennsylvania "Right To Know" List

The following ingredients are listed:

ETHANOL

2-METHYLPROPAN-2-OL

BUTANONE

Inventories**EU - EINECS/ELINCS**

All the ingredients are listed or exempt.

US - TSCA

All the ingredients are listed or exempt.

US - TSCA 12(b) Export Notification

None of the ingredients are listed.

16. Other Information

Key literature references and sources for data TOXNET; REACH dossier; supplier SDS.

Revision date 4/6/2017

Revision 5

Supersedes date 11/12/2015

Hazard statements in full H225 Highly flammable liquid and vapor.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H411 Toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.

ACA HMIS Health rating. Moderate Hazard. (2)

ACA HMIS Flammability rating. Ignites easily. (3)

ACA HMIS Physical hazard rating. Normally stable. (0)

IR-236BKA PRINTING INK

ACA HMIS Personal
protection rating.

B

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.

