

Safety Data Sheet 51-0011-02 Ink Acetone Black

according to Regulation (EC) No. 1907/2006 as amended by (EC) No. 2020/878; US OSHA 29CFR 1910.1200.

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SECTION 1: Identification

1.1 GHS Product identifier

Product name 51-0011-02 Ink Acetone Black

Product number 51-0011-02

Brand BestCode (REACH Registration number not relevant - mixture)

1.3 Recommended use of the chemical and restrictions on use

Uses advised against - Do not use for products which come into contact with foodstuffs. Do not use for private purposes (household)

1.4 Supplier's details

Name BestCode

Address 3034 SE Loop 820

Fort Worth TX 76140

USA

Telephone 817-349-8555 email Info@Bestcode.co

1.5 Emergency phone number

Chem Tel. Inc. Toll Free 800-255-3924

International 813-248-0585

SECTION 2: Hazard identification

General hazard statement

Hazardous ingredients for labelling: Acetone, n-Butyl Acetate

2.1 Classification of the substance or mixture

- Eye damage/irritation, Cat. 2A
- Specific target organ toxicity (single exposure), Cat. 3
- Flammable liquids, Cat. 2

2.2 GHS label elements, including precautionary statements

Pictograms



Danger

Hazard statement(s)

H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H225 Highly flammable liquid and vapor
H319 Causes serious eye irritation.

Precautionary statement(s)

P261 Avoid breathing dust/fume/gas/mist/vapors/spray.

P264 Wash ... thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear eye protection/face protection/protective gloves.

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.

P312 Call a POISON CENTER/doctor/.../ if you feel unwell. P337+P313 If eye irritation persists: Get medical advice/attention.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

P501 Dispose of contents/container to ...

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical/ventilating/lighting/.../ equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse

skin with water/shower.

P370+P378 In case of fire: Use ... to extinguish.
P403+P235 Store in a well-ventilated place. Keep cool.

2.3 Other hazards which do not result in classification.

Results of PBT and vPvB assessments : Does not contain a PBT-/vPvB substance in a concentration of ≥0,1%.

Endocrine disrupting properties: Does not contain an endocrine disruptor (EDC) in a concentration of ≥ 0,1%

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous components

1. Acetone

Concentration 50 - 75 % (weight)

EC no. 200-662-2 CAS no. 67-64-1 Index no. 606-001-00-8

- Flammable liquids, Cat. 2

- Specific target organ toxicity (single exposure), Cat. 3

- Eye damage/irritation, Cat. 2A

H225 Highly flammable liquid and vapor
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.

2. N-Butyl acetate

Concentration 10 - 25 % (weight)

EC no. 204-658-1 CAS no. 123-86-4 Index no. 607-025-00-1

- Flammable liquids, Cat. 3

- Specific target organ toxicity (single exposure), Cat. 3

H226 Flammable liquid and vapor

H336 May cause drowsiness or dizziness.

SECTION 4: First-aid measures

4.1 Description of necessary first-aid measures

General advice Consult a physician. Show this safety data sheet to the doctor in attendance.

Move out of dangerous area.

Do not leave the affected person unattended. remove victims out of the danger area. Keep the affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

If breathed in, move person into fresh air. If not breathing, give artificial

respiration. Consult a physician.

In case of skin contact Wash off with soap and plenty of water.

In case of eye contact Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if

present and easy to do. Continue rinsing. If eye irritation persists: Get

medical attention/advice.

Acute and delayed symptoms and effects: Causes serious eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or

hazy vision.

If swallowed Do NOT induce vomiting. Never give anything by mouth to an unconscious

person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms/effects, acute and delayed.

Narcotic effects

4.3 Indication of immediate medical attention and special treatment needed, if necessary

None

SECTION 5: Fire-fighting measures

5.1 Suitable extinguishing media

Water spray, BC-powder, Carbon dioxide (C02)

Unsuitable extinguishing media - water jet

5.2 Specific hazards arising from the chemical.

In case of insufficient ventilation and/or in use, may form flammable/explosive vapor-air mixture. Solvent vapors are heavier than air and may spread along floors. Places which are not ventilated, e.g. unventilated below ground level areas such as trenches, conduits, and shafts, are particularly prone to the presence of flammable substances or mixtures.

Hazardous combustion products:

Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO2)

5.3 Special protective actions for fire-fighters

Wear self-contained breathing apparatus for firefighting if necessary.

In case of fire and/or explosion do not breathe fumes. Coordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas. For personal protection see section 8.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Use local and general ventilation. Avoidance of ignition sources. Keep away from sources of ignition - No smoking. Take precautionary measures against static discharge, use only in well-ventilated areas. Due to danger of explosion, prevent leakage of vapors into cellars, flues, and ditches. Ground/bond container and receiving equipment. Use explosion proof electrical/ventilating/lighting/equipment. Use only non-sparking tools.

7.2 Conditions for safe storage, including any incompatibilities.

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Storage class (TRGS 510): Flammable liquids

Only Packaging's which are approved (e.g. acc. to the Dangerous Goods Regulations) may be used.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Substance	Acetone
CAS No.	67-64-1

	Limit value - Eight hou	Limit value - Eight hours		t term
	ppm	mg/m³	ppm	mg/m³
Australia	500	1185	1000	2375
<u>Austria</u>	500	1200	2000	4800
Belgium	246	594	492 (1)	1187 (1)
Canada - Ontario	250		500 (1)	
Canada - Québec	250		500 (1)	
<u>Denmark</u>	250	600	500	1200
European Union	500	1210		
<u>Finland</u>	500	1200	630 (1)	1500 (1)
France	500	1210	1000	2420
Germany (AGS)	500	1200	1000 (1)	2400 (1)
Germany (DFG)	500	1200	1000 (1)	2400 (1)

France

Poland

South Africa

South Korea

Sweden

South Africa Mining

Germany (AGS)

Germany (DFG)

People's Republic of China

<u>Hungary</u>		1210		
Ireland	500	1210		
<u>Italy</u>	500	1210		
Japan (MHLW)	500			
Japan (JSOH)	200	470		
<u>Latvia</u>	500	1210		
New Zealand	500	1185	1000	2375
Norway	125	295		
People's Republic of China		300		450 (1)
Poland		600		1800 (1)
Romania	500	1210		
<u>Singapore</u>	750	1780	1000	2380
South Africa	500		1000 (1)	
South Africa Mining	500	1185	1000 (1)	2375 (1)
South Korea	500		750 (1)	
<u>Spain</u>	500	1210		
Sweden	250	600	500 (1)	1200 (1)
Switzerland	500	1200	1000	2400
The Netherlands	500	1210	1000 (1)	2420 (1)
<u>Turkey</u>	500	1210		
<u>USA - NIOSH</u>	250	590		
<u>USA - OSHA</u>	1000	2400		
United Kingdom	500	1210	1500 (1)	3620 (1)
	Remarks			
Belgium	(1) 15 minutes average	value		
Canada - Ontario	(1) 15 minutes average	value		
Canada - Québec	(1) 15 minutes average	value		
European Union	Bold-type: Indicative O	ccupational Exposure Limit Value (IOELV)		
Finland	(1) 15 minutes average	value		

Bold type: Restrictive statutory limit values

(1) 15 minutes average value

(1) 15 minutes average

The Netherlands	(1) 15 minutes average value
United Kingdom	(1) 15 minutes average value

Substance	n-Butyl acetate
CAS No.	123-86-4

	Limit value - Eight hours		Limit value - S	hart tarm
A	ppm	mg/m³	ppm	mg/m³
Australia	150	713	200	950
<u>Austria</u>	50	241	100 (1)	480 (1)
Belgium	50	238	150 (1)	712 (1)
Canada - Ontario	150		200	
Canada - Québec	50		150 (1)	
<u>Denmark</u>	150	241	300 (1)	1420 (1)
European Union	50	241	150 (1)	723 (1)
<u>Finland</u>	50	240	150 (1)	725 (1)
France	50	241	150 (1)	723 (1)
Germany (AGS)	62	300	124 (1)	600 (1)
Germany (DFG)	100	480	200 (1)	960 (1)
Hungary		241		723 (1)
Ireland	50	241	150 (1)	723 (1)
<u>Israel</u>	50	238	150 (1)	713 (1)
<u>Italy</u>	50	241	150 (1)	723 (1)
Japan (MHLW)	150			
Japan (JSOH)	100	475		
Latvia	50	241	150 (1)	723 (1)
New Zealand	150	713	200	950
Norway	50	241		
People's Republic of China		200		300 (1)
Poland		240		720 (1)
Romania	50	241	150 (1)	723 (1)
Singapore	150	713		
South Africa	100		300 (1)	
South Africa Mining	150	710	200 (1)	950 (1)
South Korea	150		200 (1)	
Spain	50	241	150 (1)	723 (1)
Sweden	50	241	150 (1)	723 (1)
			` '	` '

<u>Switzerland</u>	50	240	150 (1)	720 (1)
The Netherlands	50	241	150 (1)	723 (1)
<u>USA - NIOSH</u>	150	710	200 (1)	950 (1)
<u>USA - OSHA</u>	150	710		
United Kingdom	150	724	200 (1)	966 (1)

	Remarks
Austria	(1) 15 minutes average value
Belgium	(1) 15 minutes average value
Canada - Québec	(1) 15 minutes average value
Denmark	(1) 15 minutes average value
European Union	(1) 15 minutes average value Bold-type: Indicative Occupational Exposure Limit Value (IOELV)
Finland	(1) 15 minutes average value
France	Bold type: Restrictive statutory limit values (1) 15 minutes average value
Germany (AGS)	(1) 15 minutes average value
Germany (DFG)	(1) 15 minutes average value
Hungary	(1) 15 minutes average value
Ireland	(1) 15 minutes average value
Israel	(1) 15 minutes average value
Italy	(1) 15 minutes average value
Latvia	(1) 15 minutes average value
People's Republic of China	(1) 15 minutes average value
Poland	(1) 15 minutes average value
Romania	(1) 15 minutes average value
South Africa	(1) 15 minutes average value
South Africa Mining	(1) 15 minutes average value
South Korea	(1) 15 minutes average value
Spain	(1) 15 minutes average value
Sweden	(1) 15 minutes average value
Switzerland	(1) 15 minutes average value
The Netherlands	(1) 15 minutes average value
USA - NIOSH	(1) 15 minutes average value
United Kingdom	(1) 15 minutes average value

8.2 Appropriate engineering controls

General ventilation

8.3 Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

Wear eye/face protection.

Body protection

Impervious clothing, Flame retardant antistatic protective clothing., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Environmental exposure controls

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

SECTION 9: Physical and chemical properties

Appearance (physical state, color, etc.)

Liquid

Odor

Pungent

Odor threshold

pH

No data available.

No data available.

No data available.

Not determined

Initial boiling point and boiling range

Not determined

56,05 °C

Flash point -17 °C
Evaporation rate Soling range S0,05 °C
No data available.

Flammability (solid, gas)

Upper/lower flammability or explosive limits

Vapor pressure

Vapor density

No data available.

No data available.

No data available.

No data available.

Relative density 8.0 lb/gal

Solubility(ies)

Partition coefficient: n-octanol/water

No data available.

No data available.

Auto-ignition temperature 420 °C

Decomposition temperature

Viscosity No data available.

Additional properties

Physical state Liquid
Color Black
Explosive properties None
Oxidizing properties None

Supplemental information regarding physical hazard classes

VOC (Lb/gal) 1,17

T2 (maximum permissible surface temperature on the equipment: 300°C)

SECTION 10: Stability and reactivity

10.1 Reactivity

Concerning incompatibility: see below "conditions to avoid" and "incompatible materials". The mixture contains reactive substance(s). Risk of ignition.

If heated: Risk of ignition

10.2 Chemical stability

See below "conditions to avoid."

10.3 Possibility of hazardous reactions

None under normal use conditions.

10.4 Conditions to avoid.

Avoid storing in direct sunlight and avoid extremes of temperature.

Heat, flames and sparks.

10.5 Incompatible materials

Oxidizers

10.6 Hazardous decomposition products

Other decomposition products - No data available in the event of fire: see section 5

N-Butyl acetate: Hazardous decomposition products formed under fire conditions. - Carbon oxides

Other decomposition products - No data available

In the event of fire: see section 5

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

Test data not available for complete mixture.

Shall not be classified as acutely toxic.

GHS of the United Nations, annex 4: May be harmful if swallowed.

Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

Serious eye damage/irritation

Causes serious eye irritation.

Respiratory or skin sensitization

Shall not be classified as a respiratory or skin sensitizer.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

Carcinogenicity

Shall not be classified as carcinogenic.

Reproductive toxicity

Shall not be classified as a reproductive toxicant.

Specific target organ toxicity (STOT) - single exposure

May cause drowsiness or dizziness.

Specific target organ toxicity (STOT) - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

SECTION 12: Ecological information

Toxicity

Shall not be classified as hazardous to the aquatic environment.

Persistence and degradability

No data available on product

Bioaccumulative potential

No data available on product

Mobility in soil

No data available

Results of PBT and vPvB assessment

Results of PBT and vPvB assesments : Does not contain a PBT-/vPvB substance in a concentration of ≥0,1%.

Endocrine disrupting properties

Does not contain an endocrine disruptor (EDC) in a concentration of ≥0,1%

Other adverse effects

No data available

SECTION 13: Disposal considerations

Disposal methods

Product disposal

Solvent reclamation/regeneration.

Packaging disposal

Dispose of as unused product.

Waste treatment

It is a dangerous waste; only packagings which are approved (e.g. acc. to ADR) may be used. Completely emptied packages may be recycled. Handle contaminated packages in the same way as the substance itself.

Sewage disposal

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

Other disposal recommendations

Please consider the relevant national or regional provisions. Waste shall be seperated into the categories that can be handled seperately by the local or national waste management facilities.

SECTION 14: Transport information

49 CFR US DOT

UN Number: 1210

Class: 3

Packing Group: II

Proper Shipping Name: Printing ink,[flammable or] Printing ink related material [(including printing ink thinning or

reducing compound),flammble]

Marine pollutant: -

Reportable quantity (RQ) - 6,196 lbs (2,813 kg) (Methyl Ethyl Ketone)

IMDG

UN Number: 1210

Class: 3

Packing Group: II EMS Number: F-E,S-D

Proper Shipping Name: Printing ink, [flammable or] Printing ink related material [(including printing ink thinning or

reducing compound),flammble]

IATA

UN Number: 1210

Class: 3

Packing Group: II

Proper Shipping Name: Printing ink,[flammable or] Printing ink related material [(including printing ink thinning or

reducing compound),flammble]

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists					
CAS # Hazardous components S. 302 (EHS) S. 304 RQ S. 313					
67-64-1	Acetone	No	Yes 5000LB	No	
123-86-4	N-Butyl Acetate	No	No	No	

CAS#	Hazardous components	Canadian NPRI	Canadian Toxic	Canadian DSL
67-64-1	Acetone	No	No	Yes
123-86-4	N-Butyl Acetate	Yes 1 tonne		Yes

CAS#	Hazardous components	CAA HAP, ODC	CWA NPDES	TSCA
67-64-1	Acetone	No	No	Yes - Inv
123-86-4	N-Butyl Acetate			Yes

CAS#	Hazardous components	CA Prop 65	Mexico INSQ	Australia ICS
67-64-1	Acetone	No	Listed	Listed
123-86-4	N-Butyl Acetate	No	Listed	Listed

CAS#	Hazardous components	New Zealand IOC	China IECSC	Japan ENCS
67-64-1	Acetone	Listed	Listed	Yes - 2-542
123-86-4	N-Butyl Acetate	Listed	Listed	Yes

CAS#	Hazardous components	Japan ISHL	Korea ECL	Philippines
67-64-1	Acetone	No	Yes KE-29367	Listed
123-86-4	N-Butyl Acetate	Yes	Yes	Listed

CAS#	Hazardous components	Taiwan TCSCA	Singapore HSL	Israel HSL:
67-64-1	Acetone	Listed	No	No
123-86-4	N-Butyl Acetate	Listed		

CAS#	Hazardous components	Germany WHCS	Switzerland Giftliste 1	Switzerland INNS
67-64-1	Acetone	Yes – 150	Yes G-2429	No
123-86-4	N-Butyl Acetate			

CAS#	Hazardous components	REACH	Kyoto GHG	Rotterdam
67-64-1	Acetone	Yes - (R), (P)	No	No
123-86-4	N-Butyl Acetate	No		

CAS#	Hazardous components	Stockholm	
67-64-1	Acetone	No	
123-86-4	N-Butyl Acetate		

SECTION 16: Other information

16.1 Further information/disclaimer

DISCLAIMER: The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigation to determine the suitability of information for their purposes. In no event shall BestCode be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, whatsoever arising, even if BestCode has been advised of the possibility of such damages.