Safety Data Sheet
51-0005-02 Ink, MEK Yellow Soft Pigment

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

Version 1.2 • Date of issue: 09-17-24

SECTION 1: Identification

1.1 GHS Product identifier

Product name	Ink, MEK Yellow Soft Pigment
Product number	51-0005-02
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 : Methyl Ethyl Ketone

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

Signal word	**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 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%

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous components

1. CYCLOHEXANONE

Concentration	1 - 5 % (weight)
EC no.	203-631-1
CAS no.	108-94-1
Index no.	606-010-00-7
REACH registration no. (EU)	01-2119453616-35-xxxx

- Flammable liquids, Cat. 3
- Acute toxicity, inhalation, Cat. 4

H226	Flammable liquid and vapor
H332	Harmful if inhaled

2. METHYL ETHYL KETONE

Concentration	50 - 75 % (weight)
EC no.	201-159-0
CAS no.	78-93-3
Index no.	606-002-00-3
REACH registration no. (EU)	01-2119457290-43-xxxx

- 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

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 affected person unattended. remove victim out of the danger area. Keep 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 inhaled	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 insfficient 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 breath fumes. Coordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water seperately. 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 vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours 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 vapours into cellars, flues and ditches. Ground/bond container and recieving 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 Packagings 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	Butan-2-one
CAS No.	78-93-3
Remarks	Methyl Ethyl Ketone (MEK)

	Limit value - Eight hours		Limit value - Short term	
	ppm	mg/m³	ppm	mg/m³
Australia	150	445	300	890
Austria	100	295	200	590
Belgium	200	600	300 (1)	900 (1)
Canada - Ontario	200		300	
Canada - Québec	50	150	100 (1)	300 (1)
Denmark	50 (1)	145 (1)	100 (1)(2)	290 (1)(2)
European Union	**200**	**600**	**300 (1)**	**900 (1)**
Finland	20	60	100 (1)	300 (1)
France	**200**	**600**	**300 (1)**	**900 (1)**
Germany (AGS)	200 (1)	600 (1)	200 (1)(2)	600 (1)(2)
Germany (DFG)	200 (1)	600 (1)	200 (1)(2)	600 (1)(2)
Hungary		600 (1)		900 (1)(2)
Ireland	200	600	300 (1)	900 (1)

Israel	200	590		
Italy	200	600	300 (1)	900 (1)
Japan (MHLW)	200			
Japan (JSOH)	200	590		
Latvia	67	200	300 (1)	900 (1)
New Zealand	150	445	300	890
Norway	75	220		
People's Republic of China		300		600 (1)
Poland		450 (1)		900 (1)(2)
Romania	200	600	300 (1)	900 (1)
Singapore	200	590	300	885
South Africa	400 (1)		600 (1)(2)	
South Africa Mining	200 (1)	600 (1)	300 (1)(2)	900 (1)(2)
South Korea	200		300 (1)	
Spain	200	600	300	900
Sweden	50	150	300 (1)	900 (1)
Switzerland	200	590	200	590
The Netherlands	197 (1)	590 (1)	300 (1)(2)	900 (1)(2)
Turkey	200	600	300 (1)	900 (1)
USA - NIOSH	200	590	300 (1)	885 (1)
USA - OSHA	200	590		
United Kingdom	200 (1)	600 (1)	300 (1)(2)	899 (1)(2)

	Remarks
Belgium	(1) 15 minutes average value
Canada - Québec	(1) 15 minutes average value
Denmark	(1) Skin (2) 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 Skin (1) 15 minutes average value
Germany (AGS)	(1) Skin (2)15 minutes average value
Germany (DFG)	(1) Skin (2) 15 minutes average value
Hungary	(1) Skin (2) 15 minutes average value
Ireland	(1) 15 minutes reference period
Italy	(1) 15 minutes average value
Latvia	(1) 15 minutes average value
People's Republic of China	(1) 15 minutes average value
Poland	(1) Skin (2) 15 minutes average value
Romania	(1) 15 minutes average value

South Africa	(1) Skin (2) 15 minutes average value
South Africa Mining	(1) Skin (2) 15 minutes average value
South Korea	(1) 15 minutes average value
Sweden	(1) 15 minutes average value
The Netherlands	(1) Skin (2) 15 miutes average value
Turkey	(1) 15 minutes average value
USA - NIOSH	(1) 15 minutes average value
United Kingdom	(1) Skin (2) 15 minutes average value

Substance	Cyclohexanone
CAS No.	108-94-1

	Limit value - Eight hours		Limit value - Short term	
	ppm	mg/m³	ppm	mg/m³
Australia	25	100		
Austria	5	20	20	80
Belgium	10 (1)	40,8 (1)	20 (1)(2)	81,6 (1)(2)
Canada - Ontario	20		50	
Canada - Québec	25 (1)	100 (1)		
Denmark	10 (1)	41 (1)	20 (1)(2)	82 (1)(2)
European Union	**10**	**40,8**	**20 (1)**	**81,6 (1)**
Finland	10	41	20 (1)	82 (1)
France	**10**	**40,8**	**20**	**81,6**
Germany (AGS)	20 (1)	80 (1)	20 (1)(2)	80 (1)(2)
Hungary		40,8 (1)		81,6 (1)(2)
Ireland	10	40,8	20 (1)	81,6 (1)
Italy	10 (1)	40,8 (1)	20 (1)(2)	81,6 (1)(2)
Japan (MHLW)	20			
Japan (JSOH)	25	100		
Latvia	10	40,8	20 (1)	81,6 (1)
New Zealand	25	100		
Norway	10 (1)	40 (1)	20 (1)(2)	80 (1)(2)
People's Republic of China		50		
Poland		40 (1)		80 (1)(2)
Romania	10	40,8	20 (1)	81,6 (1)
Singapore	25	100		
South Africa	40 (1)		100 (1)(2)	
South Africa Mining	25	100	50 (1)	200 (1)

South Korea	25 (1)		50 (1)(2)	
Spain	10 (1)	41 (1)	20 (1)(2)	82 (1)(2)
Sweden	10	41	20 (1)	81 (1)
Switzerland	25	100	50	200
The Netherlands			12,3 (1)(2)	50 (1)(2)
Turkey	10	40,8	20 (1)	81,6 (1)
USA - NIOSH	25 (1)	100 (1)		
USA - OSHA	50	200		
United Kingdom	10 (1)	41 (1)	20 (1)(2)	82 (1)(2)

	Remarks
Belgium	(1) "D" absorption of the agent through the skin, mucous membranes or eyes is an important part of the total exposure. It can be the result of both direct contact and its presence in the air. (2) 15 minutes average value
Canada - Québec	(1) Skin
Denmark	(1) Skin (2) 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
Germany (AGS)	(1) Skin (2) 15 minutes average value
Hungary	(1) Skin (2) 15 minutes average value
Ireland	(1) 15 minutes reference period
Italy	(1) Skin (2) 15 minutes average value
Latvia	(1) 15 minutes average value
Norway	(1) Skin (2) 15 minutes average value
Poland	(1) Skin (2) 15 minutes average value
Romania	(1) 15 minutes average value
South Africa	(1) Skin (2) 15 minutes average value
South Africa Mining	(1) 15 minutes average value
South Korea	(1) Skin (2) 15 minutes average value
Spain	(1) Skin (2) 15 minutes average value
Sweden	(1) 15 minutes average value
The Netherlands	(1) Skin (2) 15 minutes average value
Turkey	(1) 15 minutes average value
USA - NIOSH	(1) Skin
United Kingdom	(1) Skin (2) 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.)	
Odor	Pungent
Odor threshold	No data available.
pH	No data available.
Melting point/freezing point	Not determined
Initial boiling point and boiling range	79 °C
Flash point	-8 °C 17.6 °F
Evaporation rate	No data available.
Flammability (solid, gas)	No data available.
Upper/lower flammability or explosive limits	No data available.
Vapor pressure	7 hPa at 30°C
Vapor density	No data available.
Relative density	7.26 lb/gal
Solubility(ies)	No data available.
Partition coefficient: n-octanol/water	No data available.
Auto-ignition temperature	420 °C
Decomposition temperature	
Viscosity	No data available.

Additional properties

Physical state	Liquid
Color	Yellow
Explosive properties	None
Oxidizing properties	None

Supplemental information regarding physical hazard classes
VOC (Lb/gal) 5.99
Temperature class (USA,acc. to NEC 500) 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

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.

Additional information
Repeated exposure may cause skin dryness or cracking.

SECTION 12: Ecological information

Toxicity
Shall not be classified as harzardous 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 # 78-93-3 Methyl Ethyl Ketone S.302 (EHS): No; S.304 RQ: Yes NA; S.313 (TRI): No.

CAS # 108-94-1 Cyclohexanone S.302 (EHS): No; S.304 RQ: No; S313 (TRI): No.

California Environmental Protection Agency (Cal/EPA): Proposition 65 - Safe Drinking Water and Toxic Enforcement Act of 1987

Warning this product could exposure you to chemicals listed by the state of California under the safe Drinking Water and Toxic Enforcement Act of 1989 (Proposition 65) as being known to cause cancer, birth defects, and/or reproductive harm. See www.P65warnings.a.gov for more details.

Other US EPA or State Lists
CAS # 108-94-1 Methyl Ethyl Ketone CAA HAP, ODC: No; CWA NPDES: No; TSCA: Yes - inventory; CA Prop.65: No.

CAS # 108-94-1 Cyclohexanone CAA HAP, ODC: No; CWA NPDES: No; TSCA: Yes - inventory; CA Prop.65: No.

International Regulatory Lists
All chemicals in this product are compliant, except listed and/or active in regards to the following regulations:
AU - AIIC; CA - DSL; CA - NDSL; CN - IECSC; EU - ECSI; EU - REACH Reg.; JP - CSCL-ENCS; JP - ISHA-ENCS; KR - KECI; MX - INSQ; NZ - NZIoC; PH - PICCS; TR - CICR; TW - TCSI; US - TSCA

Restrictions according to REACH, Annex XVII
CAS # 78-93-3 Methyl Ethyl Ketone
Name acc. to inventory - flammable/pyrophoric
Restriction - R40: No 40

CAS # 108-94-1 Cyclohexanone
Name acc. to inventory - flammable/pyrophoric
Restriction - R40: No 40

51-0005-02 - This product meets the criteria for classification in accordance with regulation No 1272/2008/EC

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)
CAS # 78-93-3 Methyl Ethyl Ketone
Statutory code : 4, RQ pounds (Kg) 5000(2270)

CAS # 108-94-1 Cyclohexanone
Statutory code : 4, RQ pounds (Kg) 5000(2270)

15.2 Chemical Safety Assessment
Chemical safety assesments for substances in this mixture were not carried out.

SECTION 16: Other information

Revision Date : 09-17-24

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.