

Date: 3/19/2021

Product Number: 52-0035-01 Revision: B

Product Name: Makeup, MEK MilSpec

Based upon Regulation (EC) No 1907/2006, as amended by Regulation (EU) 2015/830

Section 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product Identifier

Product Name: Makeup, MEK MilSpec

Product Code: 52-0035-01

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

Product Use: Printing ink for use in BestCode CIJ

1.3 Details of the supplier of the safety data sheet

BestCode

3034 SE Loop 820

Fort Worth, TX 76140

817-349-8555

For further information, please contact Customer Service:

Customer Service: 817-349-8555

Email: Info@Bestcode.co

1.4 Emergency telephone number

Emergency Contact: Local Poison Information Center

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

International 813-248-0585

Section 2: Hazards identification

2.1 Classification of the mixture in accordance with Article 40 of Regulation (EC) No 1272/2008 GHS Rating:

Flammable Liquids, Category 2 Serious Eye Damage/Eye Irritation, Category 2 Specific Target Organ Toxicity (single exposure), Category 3

2.2 Label elements





Signal word: Danger



Date: 3/19/2021

Product Number: 52-0035-01 Revision: B

Product Name: Makeup, MEK MilSpec

Hazard statements:

H225 - Highly flammable liquid and vapor.

H319 - Causes serious eye irritation.

H335 - May cause respiratory irritation.

Precautionary statements:

P233 - Keep container tightly closed.

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

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

P240 - Ground/bond container and receiving equipment.

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

P243 - Take precautionary measures against static discharge.

P242 - Use only non-sparking tools.

P264 - Wash hands thoroughly after handling.

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

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

P370+378 - In case of fire, use ... to extinguish.

P303+361+353 - IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.

P305+351+338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, ifp resent and easy to do. Continue rinsing.

P337+313 - If eye irritation persists, get medical advice/attention.

P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P312 - Call a POISON CENTER/doctor/... if you feel unwell.

P403+235 - Store in cool/well-ventilated place.

P501 - Dispose of contents/container to ...

P403+233 - Store container tightly closed in well-ventilated place.

P405 - Store locked up.

2.3 Adverse Human Health Effects and Symptoms:

Prolonged or repeated skin contact may cause defatting and dermatitis.

Chronic: May cause reproductive and fetal effects. Laboratory experiments have shown mutagenic effects. Animal studies have reported the development of tumors. Prolonged exposure may cause liver, kidney, and heart damage. Chronic inhalation may cause effects similar to those of acute inhalation. Animal studies have reported that fetal effects/abnormalities may occur when maternal toxicity is seen.

Chronic overexposure to vapors may cause lung damage.

Inhalation: Inhalation of high concentrations may cause central nervous system effects characterized by nausea, headache, dizziness, unconsciousness and coma. Causes respiratory tract irritation. May cause narcotic effects in high concentration. Causes upper respiratory tract irritation. Inhalation of



Date: 3/19/2021

Product Number: 52-0035-01 Revision: B

Product Name: Makeup, MEK MilSpec

vapors may cause drowsiness and dizziness. May cause central nervous system effects such as nausea and headache. Neurobehavioural effects of exposure to MEK (200 ppm for 4 hrs) were studied with 137 volunteers. There were no statistically significant effects observed in biochemical, psychomotor, sensorimotor and psychological tests.

Skin Contact: Causes moderate skin irritation. May cause cyanosis of the extremities. May cause irritation with pain and stinging, especially if the skin is abraded. Isopropanol has a low potential to cause allergic skin reactions; however, rare cases of allergic contact dermatitis have been reported. Dermal absorption has been considered toxicologically insignificant. The cases of deep coma associated with skin contact are thought to be a consequence of gross isopropanol vapor inhalation in rooms with inadequate ventilation, rather than being attributable to percutaneous absorption of isopropanol per se. May be absorbed through the skin in harmful amounts. Repeated or prolonged exposure may cause drying and cracking of the skin. Only one human case of skin sensitization was located. Negative results were obtained in an animal test; MEK did not produce skin sensitization in the mouse ear thickness test.

Eye Contact: Causes severe eye irritation. May cause painful sensitization to light. May cause chemical conjunctivitis and corneal damage. Produces irritation, characterized by a burning sensation, redness, tearing, inflammation, and possible corneal injury. May cause transient corneal injury. Causes eye irritation. Vapors may cause eye irritation. Animal evidence suggests that MEK is a moderate to severe eye irritant.

Ingestion: May cause systemic toxicity with acidosis. May cause central nervous system depression, characterized by excitement, followed by headache, dizziness, drowsiness, and nausea. Advanced stages may cause collapse, unconsciousness, coma and possible death due to respiratory failure. Causes gastrointestinal irritation with nausea, vomiting and diarrhea. May cause kidney damage. Aspiration of material into the lungs may cause chemical pneumonitis, which may be fatal. The probable oral lethal dose in humans is 240 ml (2696 mg/kg), but ingestion of only 20 ml (224 mg/kg) has, but in gestion of only 20 ml (224 mg/kg) has caused poisoning. May cause irritation of the digestive tract. Possible aspiration hazard. May cause central nervous system depression. Animal evidence suggests that MEK can be aspirated (inhaled) into the lungs during ingestion or vomiting.



Date: 3/19/2021

Product Number: 52-0035-01 Revision: E

Product Name: Makeup, MEK MilSpec

Section 3: Composition/information on ingredients

3.1 Substances:

3.2 Mixtures:

CAS#	EC#	Hazardous components / REACH Registration No.	Concentration	GHS Classification
78-93-3	201-159-0	Methyl Ethyl Ketone	70.0-100.0%	Flam. Liq. 2: H225; Eye Irrit. 2: H319; STOT SE 3: H336;
64-17-5	200-578-6 603-002-00-5	Ethyl alcohol	5.0 -10.0 %	Flam. Liq. 2: H225
67-63-0	200-661-7 603-117-00-0	Isopropyl alcohol	0.1-1.0%	Flam. Liq. 3 STOT (SE) 3

Section 4: First Aid Measures

4.1 Description of first aid measures

Inhalation Remove from exposure and move to fresh air immediately. If not breathing, give

artificial respiration. If breathing is difficult, give oxygen. Get medical aid. Do NOT use

mouth-to-mouth resuscitation. If inhaled, remove to fresh air.

Eyes: Get medical aid. Gently lift eyelids and flush continuously with water. In case of

contact, immediately flush eyes with plenty of water for a t least 15 minutes.

Skin: Wash clothing before reuse. In case of contact, flush skin with plenty of water.

Remove contaminated clothing and shoes. Get medical aid if irritation develops and

persists.

Ingestion: If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything

by mouth to an unconscious person. Potential for aspiration if swallowed. Get medical aid immediately. Do not induce vomiting unless directed to do so by medical

personnel. If vomiting occurs naturally, have victim lean forward.

4.2 Most Important symptoms and effects, both acute and delayed

4.3 Indication of any immediate medical attention and special treatment needed

Notes to doctor: Treat symptomatically and supportively. Persons with skin or eye disorders or

liver, kidney, chronic respiratory diseases, or central and peripheral nervous sytem diseases may be at increased risk from exposure to this substance. Antidote: Replace fluid and electrolytes. Urine acetone test may be helpful in

diagnosis. Hemodialysis should be considered in severe intoxication.



Date: 3/19/2021

Product Number: 52-0035-01 Revision: E

Product Name: Makeup, MEK MilSpec

Section 5: Fire Fighting Measures

5.1 Extinguishing media

For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam. Water may be ineffective. Do NOT use straight streams of water. For small fires, use carbon dioxide, dry chemical, dry sand, or alcohol-resistant foam. Cool containers with flooding quantities of water until well after fire is out. In case of fire, use carbon dioxide, dry chemical powder or appropriate foam. Water may be ineffective because it will not cool material below its flash point.

5.2 Special hazards arising from the substance or mixture

5.3 Advice for firefighters

Replace fluid and electrolytes. As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Vapors may form explosive mixtures with air. Vapors can travel to a source of ignition and flash back. Will burn if involved in a fire. Can release vapors that form explosive mixtures at temperatures above the flashpoint. Use water spray to keep fire-exposed containers cool. Flammable liquid and vapor. May form explosive peroxides. Extremely flammable liquid and vapor. Vapor may cause flash fire. Vapors are heavier than air and may travel to a source of ignition and flash back. Vapors can spread along the ground and collect in low or confined areas.

Section 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel

Evacuate

6.1.2 For emergency responders

Use personal protective equipment. Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves.

6.2 Environmental Precautions

No data available.

6.3 Methods and material for containment and cleaning up

6.3.1 For Containment:

Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Clean up spills immediately, observing precautions in the Protective Equipment section. Remove all sources of ignition. Use a spark-proof tool. Provide ventilation.



Date: 3/19/2021

Product Number: 52-0035-01 Revision: E

Product Name: Makeup, MEK MilSpec

6.3.2 Clean up and disposal of spill:

Sweep up, place in a bag and hold for waste disposal. Ventilate area and wash spill site after material pickup is complete. Avoid runoff into storm sewers and ditches which lead to waterways. A vapor suppressing foam may be used to reduce vapors.

Section 7: Handling and storage

7.1 Precautions for safe handling

Wash thoroughly after handling. Use only in a well-ventilated area. Ground and bond containers when transferring material. Use spark-proof tools and explosion proof equipment. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep container tightly closed. Keep away from heat, sparks and flame. Avoid ingestion and inhalation. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames. Remove contaminated clothing and wash before reuse. Take precautionary measures against static discharges. Avoid breathing dust, mist, or vapor. Do not allow to evaporate to near dryness. Use only with adequate ventilation. Avoid breathing vapor.

7.2 Conditions for safe storage, including any compatibilities

Keep away from heat, sparks and flame. Keep away from sources of ignition. Store in a tightly closed container. Keep from contact with oxidizing materials. Store in a cool, dry, well-ventilated area away from incompatible substances. Flammables-area. Do not store near perchlorates, peroxides, chromic acid or nitric acid. Do not store in direct sunlight. After opening, purge container with nitrogen before reclosing. Periodically test for peroxide formation on long-term storage. Addition of water or appropriate reducing materials will lessen peroxide formation. Store protected from moisture. Containers should be dated when opened and tested periodically for the presence of peroxides. Should crystals form in a peroxidizable liquid, peroxidation may have occurred and the product should be considered extremely dangerous. In this instance, the container should only be opened remotely by professionals. All peroxidizable substances should be stored away from heat and light and be protected from ignition sources.

7.3 Specific end use(s)

Fluid delivery to BestCode Series 8 CIJ. Follow safety instructions outlined in 7.1 & 7.2 while handling. Observe warnings provided with BestCode Series 8 CIJ system when installing and handling fluids.



Date: 3/19/2021

Product Number: 52-0035-01 Revision: B

Product Name: Makeup, MEK MilSpec

Section 8: Exposure control/personal protection

8.1 Control parameters

CAS#	Hazardous components	ACGIH TLV	Australia	Austria
78-93-3	Methyl Ethyl Ketone	TLV: 200 ppm	TWA: 295 mg/m3	TWA: 445 mg/m3
		STEL: 300 ppm	(100 ppm)	(150 ppm)
			STEL: 590 mg/m3	STEL: 890 mg/m3
			(200 ppm)	(300 ppm)
64-17-5	Ethyl alcohol	TLV: 1000 ppm	TWA: 1900 mg/m3	TWA: 1880 mg/m3
			(1000 ppm)	(1000 ppm)
			STEL: 3800 mg/m3	STEL: ()
			(2000 ppm)	
67-63-0	Isopropyl alcohol	TLV: 200 ppm	TWA: 500 mg/m3	TWA: 983 mg/m3
		STEL: 400 ppm	(200 ppm)	(400 ppm)
			STEL: 2000 mg/m3	STEL: 1230 mg/m3
			(800 ppm)	(500 ppm)

CAS#	Hazardous components	Belgium OEL	California, USA	Ontario, CA
78-93-3	Methyl Ethyl Ketone	TWA: 600 mg/m3	TWA: 590 mg/m3	TWA: 200 ppm
		(200 ppm)	(200 ppm)	STEL: 300 ppm
		STEL: 900 mg/m3	STEL: 885 mg/m3	
		(300 ppm)	(300 ppm)	
64-17-5	Ethyl alcohol	TWA: 1907 mg/m3	TWA: 1900 mg/m3	STEL: 1000 ppm
		(1000 ppm)	(1000 ppm)	
67-63-0	Isopropyl alcohol	TWA: 500 mg/m3	TWA: 980 mg/m3	TWA: 200 ppm
		(200 ppm)	(400 ppm)	STEL: 400 ppm
		STEL: 1000 mg/m3	STEL: 1225 mg/m3	
		(400 ppm)	(500 ppm)	

CAS#	Hazardous components	China	Québec, CA	German AGS
78-93-3	Methyl Ethyl Ketone	TWA: 300 mg/m3	TWA: 150 mg/m3	TWA: 600 mg/m3
		STEL: 600 mg/m3	(50 ppm)	(200 ppm)
		(15 min)	STEL: 300 mg/m3	STEL: 600 mg/m3
			(100 ppm)	(200 ppm) (15 min)
64-17-5	Ethyl alcohol		TWA: 1880 mg/m3	TWA: 960 mg/m3
			(1000 ppm)	(500 ppm)
				STEL: 1920 mg/m3
				(1000 ppm) (15 min)
67-63-0	Isopropyl alcohol	TWA: 350 mg/m3	TWA: 983 mg/m3	TWA: 500 mg/m3
		STEL: 700 mg/m3	(400 ppm)	(200 ppm)
		(15 min)	STEL: 1230 mg/m3	STEL: 1000 mg/m3
			(500 ppm)	(400 ppm) (15 min)



Date: 3/19/2021

Product Number: 52-0035-01 Revision: B

Product Name: Makeup, MEK MilSpec

CAS#	Hazardous components	Germany MAK/TRK	Denmark OEL	Spain OEL
78-93-3	Methyl Ethyl Ketone	TWA: 295 mg/m3 (100 ppm) STEL: 600 mg/m3 (200 ppm) (30min) (4x)	TWA: 145 mg/m3 (50 ppm) STEL: 290 mg/m3 (100 ppm)	TWA: 600 mg/m3 (200 ppm) STEL: 900 mg/m3 (300 ppm)
64-17-5	Ethyl alcohol	TWA: 1900 mg/m3 (1000 ppm) STEL: 3800 mg/m3 (2000 ppm) (60min) (3x) TWA: 960 mg/m3 (500 ppm)	TWA: 1900 mg/m3 (1000 ppm) STEL: 3800 mg/m3 (2000 ppm)	STEL: 1910 mg/m3 (1000 ppm)
67-63-0	Isopropyl alcohol	TWA: 500 mg/m3 (200 ppm) STEL: 2000 mg/m3 (15/30min)(4x) (800 ppm (15/30min) (4x))	TWA: 500 mg/m3 (200 ppm) STEL: 980 mg/m3 (400 ppm)	TWA: 500 mg/m3 (200 ppm) STEL: 1000 mg/m3 (400 ppm)

CAS#	Hazardous components	Europe	Finland OEL	France VL
78-93-3	Methyl Ethyl Ketone	TWA: 600 mg/m3	STEL: 300 mg/m3	TWA: 600 mg/m3
		(200 ppm)	(100 ppm) (15 min)	(200 ppm)
		STEL: 900 mg/m3		STEL: 900 mg/m3
		(300 ppm)		(300 ppm)
64-17-5	Ethyl alcohol		TWA: 1900 mg/m3	TWA: 1900 mg/m3
			(1000 ppm)	(1000 ppm)
			STEL: 2500 mg/m3	STEL: 9500 mg/m3
			(1300 ppm)(15min)	(5000 ppm)
67-63-0	Isopropyl alcohol		TWA: 500 mg/m3	STEL: 980 mg/m3
			(200 ppm)	(400 ppm)
			STEL: 620 mg/m3	
			(250 ppm) (15 min)	



Date: 3/19/2021

Product Number: 52-0035-01 Revision: B

Product Name: Makeup, MEK MilSpec

CAS#	Hazardous components	Hungary OEL	Ireland OEL	Italy OEL
78-93-3	Methyl Ethyl Ketone	TWA: 600 mg/m3	TWA: 600 mg/m3	TWA: 600 mg/m3
		STEL: 900 mg/m3	(200 ppm)	(200 ppm)
			STEL: 900 mg/m3	STEL: 900 mg/m3
			(300 ppm) (15 min)	(300 ppm)
64-17-5	Ethyl alcohol	TWA: 1900 mg/m3	STEL: 1000 ppm	
		STEL: 7600 mg/m3	(15 min)	
67-63-0	Isopropyl alcohol	TWA: 500 mg/m3	TWA: 200 ppm	
		STEL: 2000 mg/m3	STEL: 400 ppm (15	
			min)	

CAS#	Hazardous components	South Korea	Latvia OEL	Mexico OEL
78-93-3	Methyl Ethyl Ketone	TWA: 590 mg/m3	TWA: 200 mg/m3	TWA: 590 mg/m3
		(200 ppm)	(67 ppm)	(200 ppm)
		STEL: 885 mg/m3	STEL: 900 mg/m3	STEL: 885 mg/m3
		(300 ppm)	(300 ppm) (15 min)	(300 ppm)
64-17-5	Ethyl alcohol	TWA: 1900 mg/m3	TWA: 1000 mg/m3	TWA: 1900 mg/m3
		(1000 ppm)		(1000 ppm)
67-63-0	Isopropyl alcohol	TWA: 480 mg/m3	TWA: 350 mg/m3	TWA: 980 mg/m3
		(200 ppm)	STEL: 600 mg/m3	(400 ppm)
		STEL: 980 mg/m3	(15 min)	STEL: 1225 mg/m3
		(400 ppm)		(500 ppm)

CAS#	Hazardous components	Malaysia OEL	NIOSH	Netherlands OEL
78-93-3	Methyl Ethyl Ketone	TWA: 590 mg/m3	TWA: 200 ppm	TWA: 590 mg/m3
		(200 ppm)	STEL: 300 ppm	STEL: 900 mg/m3
64-17-5	Ethyl alcohol	TWA: 1880 mg/m3	TWA: 1900 mg/m3	TWA: 260 mg/m3
		(1000 ppm)	(1000 ppm)	STEL: 1900 mg/m3
67-63-0	Isopropyl alcohol	TWA: 983 mg/m3	TWA: 980 mg/m3	
		(400 ppm)	(400 ppm)	
			STEL: 1225 mg/m3	
			(500 ppm)	

CAS#	Hazardous components	New Zealand	OSHA PELs	Poland
78-93-3	Methyl Ethyl Ketone	TWA: 445 mg/m3 (150 ppm) STEL: 890 mg/m3 (300 ppm)	PEL: 200 ppm	TWA: 450 mg/m3 STEL: 900 mg/m3
64-17-5	Ethyl alcohol	TWA: 1880 mg/m3 (1000 ppm)	PEL: 1000 ppm	TWA: 1900 mg/m3



Date: 3/19/2021

Product Number: 52-0035-01 Revision: B

Product Name: Makeup, MEK MilSpec

67-63-0	Isopropyl alcohol	TWA: 983 mg/m3	PEL: 400 ppm	TWA: 900 mg/m3
		(400 ppm)		STEL: 1200 mg/m3
		STEL: 1230 mg/m3		
		(500 ppm)		

CAS#	Hazardous components	Sweden OEL	Singapore	Britain EH40
78-93-3	Methyl Ethyl Ketone	TWA: 150 mg/m3	TWA: 590 mg/m3	TWA: 600 mg/m3
		(50 ppm)	(200 ppm)	(200 ppm)
		STEL: 300 mg/m3	STEL: 885 mg/m3	STEL: 899 mg/m3
		(100 ppm) (15 min)	(300 ppm)	(300 ppm)
64-17-5	Ethyl alcohol	TWA: 1000 mg/m3	TWA: 1880 mg/m3	TWA: 1920 mg/m3
		(500 ppm)	(1000 ppm)	(1000 ppm)
		STEL: 1900 mg/m3		STEL: ()
		(1000 ppm) (15 min)		
67-63-0	Isopropyl alcohol	TWA: 350 mg/m3	TWA: 983 mg/m3	TWA: 999 mg/m3
		(150 ppm)	(400 ppm)	(400 ppm)
		STEL: 600 mg/m3	STEL: 1230 mg/m3	STEL: 1250 mg/m3
		(250 ppm) (15 min)	(500 ppm)	(500 ppm)

CAS#	Hazardous components	Switzerland OEL	Japan OEL	
78-93-3	Methyl Ethyl Ketone			
64-17-5	Ethyl alcohol			
67-63-0	Isopropyl alcohol	TWA: 500 mg/m3 (200 ppm) STEL: 1000 mg/m3 (400 ppm)		

8.2 Exposure controls:

8.2.1 Appropriate engineering controls:

Use explosion-proof ventilation equipment. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits. Ventilation fans and other electrical service must be non-sparking and have an explosion-proof design.

8.2.2 Individual protection measures, such as personal protective equipment

Eye/Face protection: Wear appropriate protective eyeglasses or chemical safety goggles as

described by OSHA's eye and face protection regulations in 29 CFR

1910.133 or European Standard

Skin protection: Wear appropriate protective gloves to prevent skin exposure. Wear

appropriate protective clothing to prevent skin exposure.



Date: 3/19/2021

Product Number: 52-0035-01 Revision: E

Product Name: Makeup, MEK MilSpec

Respiratory protection: A respiratory protection program that meets OSHA's 29 CFR 1910.134

and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use. Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or

other symptoms are experienced.

Hygienic Practices: Wash thoroughly after handling.

Section 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance:	Clear liquid (Upon aging, clear or colorless fluids may develop a slight yellow tint				
	which will not affect the product performance).				
Odor:	Solvent	Odor threshold:	No data available		
pH:	No data available	Melting point:	-114.10 C87.00 C		
Boiling range:	78.00 C - 82.00 C	Flash point:	>-7.0 C		
Evaporation rate:	3.4 (BuAC=1)	Upper Explosive Limit:	No data available		
		Lower Explosive Limit:	No data available		
Flammability:	No data available	Vapor Pressure:	67 MM_HG at 20.0 C		
Vapor density:	> Air	Relative Density:	0.806 (H2O = 1 @ 20 °C)		
Solubility(ies):	Miscible	Partition coefficient	No data available		
		n-octanol/water:			
Auto-ignition	>350.00 C	Decomposition	No data available		
temperature:		temperature:			
Viscosity:	No data available		No data available		
Explosive properties:	Explosive properties: 99.99% Volatile by volume.				
Oxidizing properties:					

9.2 Other information:

Miscibility: No data available	VOC:	No data available
--------------------------------	------	-------------------

Section 10: Stability and reactivity

10.1 Reactivity

No data available.

10.2 Chemical stability

Stable under normal conditions.



Date: 3/19/2021

Product Number: 52-0035-01 Revision: E

Product Name: Makeup, MEK MilSpec

10.3 Possibility of hazardous reactions

Will not occur.

10.4 Conditions to avoid:

Incompatible materials, ignition sources, Excess heat, Light.

10.5 Incompatible materials:

Strong oxidizing agents, acids, Alkali metals, Ammonia, hydrazine, Peroxides, Sodium, Acid anhydrides, calcium hypochlorite, chromyl chloride, nitrosyl perchlorate, bromine pentafluoride, Perchloric acid, silver nitrate, mercuric nitrate, potassium tert-butoxide, magnesium perchlorate, Acid chlorides, platinum, uranium hexafluoride, silver oxide, iodine heptafluoride, acetyl bromide, disulfuryl difluoride, tetrachlorosilane + water, acetyl chloride, permanganic acid, ruthenium (VIII) oxide, uranyl perchlorate, Strong acids, Amines, ethylene oxide, isocyanates, acetaldehyde, chlorine, phosgene, Attacks some forms of plastics, rubbers, and coatings. aluminum at high temperatures. 2-propanol.

10.6 Hazardous decomposition products

Carbon monoxide, irritating and toxic fumes and gases, Carbon dioxide.

Section 11: Toxicological information

11.1 Information on Toxicological effects

Acute toxicity: CAS# 78-93-3:

Acute toxicity, LD50, Intraperitoneal, Mouse, 616.0 MG/KG.

Result:

Lungs, Thorax, or Respiration: Sputum.

Biochemical: Metabolism (Intermediary): Other proteins.

Biochemical: Metabolism (intermediary): Effect on inflammation or mediation

of inflammation.

- Shell Chemical Company. Unpublished Report., Vol/p/yr: -,6, 1961

Acute toxicity, LD50, Skin, Species: Rabbit, 6480. MG/KG.

Result:

Lungs, Thorax, or Respiration: Other changes.

Biochemical: Metabolism (intermediary): Effect on inflammation or mediation

of inflammation.

- Shell Chemical Company., Vol/p/yr: MSDS-5390-,

Acute toxicity, LC50, Inhalation, Mouse, 32.00 MG/M3.

Result:

Brain and Coverings: Other degenerative changes.



Date: 3/19/2021

Product Number: 52-0035-01 Revision: B

Product Name: Makeup, MEK MilSpec

Biochemical: Metabolism (intermediary): Effect on inflammation or mediation

of inflammation.

Acute toxicity, LD50, Intraperitoneal, Species: Guinea pig, 2.000 GM/KG.

Result:

Immunological Including Allergic: Increase in humoral immune response.

Skin May cause skin irritation.

corrosion/irritation:

Serious eye Ca

damage/irritation:

Causes eye irritation.

Respiratory or skin Material may be irritating to mucous membranes and upper respiratory tract.

sensitization: Harmful if inhaled.
Germ cell No data available

mutagenicity:

Carcinogenicity: CAS# 64-17-5: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

CAS# 67-63-0: Notlisted by ACGIH, IARC, NTP, or CA Prop 65. CAS# 78-93-3: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Reproductive toxicity: No data available STOT-single exposure: No data available STOT-repeated No data available

exposure:

Aspiration hazard May be harmful if swallowed.

11.1.1 Hazard Class information:

No data available

11.1.2 Mixture toxicity:

No data available

11.1.3 Critical studies:

No data available

11.1.4 Non-compliance hazard class:

No data available

11.1.5 Information on likely routes of exposure:

No data available

11.1.6 Symptoms related to the physical, chemical and toxicological characteristics:

No data available

11.1.7 Delayed and immediate effects as well as chronic effects from short and long-term exposure:

No data available

11.1.8 Interactive effects:



Date: 3/19/2021

Product Number: 52-0035-01 Revision: E

Product Name: Makeup, MEK MilSpec

No data available

11.1.9 Absence of specific data:

No data available

11.1.10 Mixtures:

No data available

11.1.11 Mixture vs Substance information:

No data available

11.1.12 Other information:

No data available

Section 12: Ecological information

12.1 Toxicity:

When released to the atmosphere it will photodegrade in hours (polluted urban atmosphere) to an estimated range of 4 to 6 days in less polluted areas. Rainout should be significant.

Ecotoxicity: Fish: Fathead Minnow: 1000 ppm; 96h; LC50Daphnia: 1000 ppm; 96h; LC50Fish: Gold orfe: 8970-9280 ppm; 48h; LC50 IPA has a high biochemical oxygen demand and a potential to cause oxygen depletion in aqueous systems, a low potential to affect aquatic organisms, a low potential to affect secondary waste treatment microbial metabolism, a low potential to affect the germination of some plants, a high potential to biodegrade (low persistence) with unacclimated microorganisms from activated sludge.

Physical: THOD: 2.40 g oxygen/gCOD: 2.23 g oxygen/gBOD-5: 1.19-1.72 g oxygen/g.

Environmental: Substance evaporates in water with T1/2= 3D (rivers) to 12D (lakes). Substance is not expected to bioconcentrate in marine life.

Physical: Substance photodegrades in air with T1/2 = 2.3 days. Oxidizes rapidly by photo-chemical reactions in air. Readily biodegradable meeting the 10 day window criterion. Not expected to bioaccumulate significantly.

12.2 Persistence and degradability:

No data available

12.3 Bioaccumulative potential:

No data available



Date: 3/19/2021

Product Number: 52-0035-01 Revision: B

Product Name: Makeup, MEK MilSpec

12.4 Mobility in soil:

No data available

12.5 Results of PBT and vPvB assessment:

No data available

12.6 Other adverse effects:

No data available

Section 13: Disposal considerations

13.1 Waste treatment methods:

Chemical waste generators must determine whether a discarded chemical is classified as hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed.

RCRA U-Series:

CAS# 78-93-3: waste number U159 (Ignitable waste, Toxic waste).

Section 14: Transport information

L4.1	UN number:	1210
L4.2	Proper shipping name:	
	US DOT:	Printing Ink Related Material
	Canadian TDG:	Printing ink, [flammable or] Printing ink related material
		[(including printing ink thinning or reducing compound), flammable]
	European ADR/RID:	Printing ink, [flammable or] Printing ink related material [(including printing ink thinning or reducing compound), flammable]
	IMDG/IMO:	Printing ink, [flammable or] Printing ink related material [(including printing ink thinning or reducing compound), flammable]
	ICAO/IATA:	Printing ink, [flammable or] Printing ink related material [(including printing ink thinning or reducing compound), flammable]
L4.3	Transport hazard class(es) :	3 - FLAMMABLE LIQUID



Date: 3/19/2021

Product Number: 52-0035-01 Revision: B

Product Name: Makeup, MEK MilSpec

14.4	Packing group:	II
14.5	Environmental hazards:	N/A
14.6	Special precautions for user:	N/A
14.7	Transport in bulk according to Annex	II of Marpol and the IBC Code:
	N/A	

Section 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:

EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists					
CAS # Hazardous components					
78-93-3	Methyl Ethyl Ketone	No	Yes 5000LB	No	
64-17-5	Ethyl alcohol	No	No	No	
67-63-0	Isopropyl alcohol	No	No	Yes	

CAS#	Hazardous components	Canadian NPRI	Canadian Toxic	Canadian DSL
78-93-3	Methyl Ethyl Ketone	Yes	No	Yes
64-17-5	Ethyl alcohol	Yes	No	Yes
67-63-0	Isopropyl alcohol	Yes	No	Yes

CAS#	Hazardous components	CAA HAP, ODC	CWA NPDES	TSCA
78-93-3	Methyl Ethyl Ketone	No	No	Yes- Inv
64-17-5	Ethyl alcohol	No	No	Yes- Inv
67-63-0	Isopropyl alcohol	No	No	Yes- Inv

CAS#	Hazardous components	CA Prop 65	Mexico INSQ	Australia ICS
78-93-3	Methyl Ethyl Ketone	No	Yes – 1193	Yes
64-17-5	Ethyl alcohol	No	Yes	Yes
67-63-0	Isopropyl alcohol	No	Yes – 1219	Yes

CAS#	Hazardous components	New Zealand IOC	China IECSC	Japan ENCS
78-93-3	Methyl Ethyl Ketone	Yes	Yes	Yes – 2-542
64-17-5	Ethyl alcohol	Yes	Yes	Yes – 5-153
67-63-0	Isopropyl alcohol	Yes	Yes	Yes -2-207



Date: 3/19/2021

Product Number: 52-0035-01 Revision: B

Product Name: Makeup, MEK MilSpec

CAS#	Hazardous components	Japan ISHL	Korea ECL	Philippines
78-93-3	Methyl Ethyl Ketone	No	Yes – KE-24094	Yes
64-17-5	Ethyl alcohol	No	Yes – KE-13217	Yes
67-63-0	Isopropyl alcohol	Yes 2-(-8)-319	Yes – KE – 29363	Yes

CAS#	Hazardous components	Taiwan TCSCA	Singapore HSL	Israel HSL:
78-93-3	Methyl Ethyl Ketone	Yes	No	No
64-17-5	Ethyl alcohol	Yes	No	Yes - Cat
67-63-0	Isopropyl alcohol	Yes	No	Yes – Cat.

CAS#	Hazardous components	Germany WHCS	Switzerland Giftliste 1	Switzerland INNS
78-93-3	Methyl Ethyl Ketone	Yes – 150	Yes G-2429	No
64-17-5	Ethyl alcohol	Yes – 96	Yes – G-1158	No
67-63-0	Isopropyl alcohol	Yes – 135	Yes - G-1712	No

CAS#	Hazardous components	REACH	Kyoto GHG	Rotterdam
78-93-3	Methyl Ethyl Ketone	Yes – (R), (P)	No	No
64-17-5	Ethyl alcohol	Yes – (R), (P)	No	No
67-63-0	Isopropyl alcohol	Yes – (R), (P)	No	No

CAS#	Hazardous components	Stockholm
78-93-3	Methyl Ethyl Ketone	No
64-17-5	Ethyl alcohol	No
67-63-0	Isopropyl alcohol	No

Canadian WHMIS Classification:





CLASS B, DIVISION 2: Flammable Liquids

CLASS D, DIVISION 2, SUBDIVISION A: Very Toxic Materials (carcinogens, reproductive toxicity, etc.)

15.2 Chemical safety assessment



Date: 3/19/2021

Product Number: 52-0035-01 Revision: B

Product Name: Makeup, MEK MilSpec

Section 16: Other information

Revision Date: 3/19/2021

Revision Notes: Revision B: Format updated to (EU) 2015/830.

Additional Information:

Company Disclaimer:

The information and recommendations contained herein are, to the best of BestCode's knowledge and belief, accurate and reliable as of the date issued. Because many factors may affect processing or application/use, BestCode recommend that you make tests to determine the suitability of a product for your particular purpose prior to use. It is the user's responsibility to satisfy itself that the product is suitable for the intended use. If buyer repackages this product, it is the user's responsibility to ensure proper health, safety and other necessary information is included with and/or on the container. Appropriate warnings and safe-handling procedures should be provided to handlers and users. Alteration of this document is strictly prohibited. Except to the extent required by law, re-publication or retransmission of this document, in whole or in part, is not permitted. In no case shall the descriptions, information, data or designs provided be considered a part of our terms and conditions of sale. Further, you expressly understand and agree that the descriptions, designs, date and information furnished by BestCode hereunder are given gratis and BestCode assumes no obligation or liability for the description, designs, data and information given or results obtained. All such being given and accepted at your risk.