Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015) Issue date: 9/19/2016 Revision date: 12/3/2021 Version: 2.0

1.1. Product identifier		
Product form	: Mixture	
Product name	: Trade Secret Markers	
Product code	: 766XXX, 767XXX, 762XXX, 68726X and 77615X	
Synonyms	: Factory Marker, Pump Marker, HD Graining Marker, Trade Secret Markers, Graining Pens.	
1.2. Recommended use and restrictio	ons on use	
Recommended use	: Furniture touch-up	
1.3. Supplier		
Dover Finishing Products, Inc.		
180 Avenue du Voyageur		
H9R 6A8 Pointe-Claire, QC - Canada		
T 514-420-6030		
dfpservice@dfp.ca		
1.4. Emergency telephone number		
Emergency number	: 1-800-354-4445	
2.1. Classification of the substance o	r mixture	
Classification (GHS CA)		
Flam. Liq. 2	H225 Highly flammable liquid and vapour.	
Acute Tox. 4 (Dermal)	H312 Harmful in contact with skin.	
Eye Irrit. 2A	H319 Causes serious eye irritation.	
Carc. 2	H351 Suspected of causing cancer.	
Repr. 1B	H360 May damage fertility or the unborn child.	
STOT SE 2	H371 May cause damage to organs.	
2.2. GHS Label elements, including p	recautionary statements	
GHS-CA labelling		
Hazard pictograms (GHS-CA)		
Signal word (GHS CA)	: Danger	
Hazard statements (GHS-CA)	: H225 - Highly flammable liquid and vapour.	
	H312 - Harmful in contact with skin.	
	H319 - Causes serious eye irritation.	
	H351 - Suspected of causing cancer.	
	H360 - May damage fertility or the unborn child.	
	H371 - May cause damage to organs.	
Procedutionary statements (CLIS CA)		
Precautionary statements (GHS-CA)	: P201 - Obtain special instructions before use	
Precautionary statements (GHS-CA)	 P201 - Obtain special instructions before use P202 - Do not handle until all safety precautions have been read and understood 	
Precautionary statements (GHS-CA)	: P201 - Obtain special instructions before use	

Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

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
P260 - Do not breathe dust/fume/gas/mist/vapours/spray
P264 - Wash hands, forearms and face thoroughly after handling
P270 - Do not eat, drink or smoke when using this product
P280 - Wear protective gloves/protective clothing/eye protection/face protection
P308+P311 - IF exposed or concerned: Call a POISON CENTER or doctor
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse
skin with water
P362+P364 - Take off contaminated clothing and wash it before reuse
P312 - Call a POISON CENTER or doctor if you feel unwell
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove
contact lenses, if present and easy to do. Continue rinsing
P337+P313 - If eye irritation persists: Get medical advice/attention
P403+P235 - Store in a well-ventilated place. Keep cool
P405 - Store locked up
P501 - Dispose of contents/container to hazardous or special waste collection point, in
accordance with local, regional, national and/or international regulation.

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS CA)

90% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal)

3.1. Substances

Not applicable

3.2. Mixtures

Name	Chemical name / Synonyms	Product identifier	%*
Ethyl alcohol	Methylcarbinol / Ethanol / ALCOHOL / Alcohol anhydrous / Alcohol / Grain alcohol	CAS-No.: 64-17-5	80 - 100
Isopropyl alcohol	2-Hydroxypropane / 2-Propyl alcohol / 2- Propanol / Isopropanol / Propan-2-ol / ISOPROPYL ALCOHOL / Propanol, 2- / Isopropylic alcohol	CAS-No.: 67-63-0	5 - 10
Diacetone alcohol	4-Hydroxy-4-methyl pentan-2-one / 4- Hydroxy-4-methyl-2-pentanone / 4- Hydroxy-4-methylpentanone-2 / Pentan-2- one, 4-hydroxy-4-methyl- / 2-Pentanone, 4-hydroxy-4-methyl- / 4-Hydroxy-4- methylpentan-2-one / DIACETONE ALCOHOL / 4-Hydroxy-4-methyl pentan- 2-one alcohol / 4-Hydroxy-4-methyl- pentane-2-on	CAS-No.: 123-42-2	5 - 10

Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

Name	Chemical name / Synonyms	Product identifier	%*
Methanol	Methyl alcohol / Carbinol / Methyl hydroxide / Wood alcohol / METHYL ALCOHOL	CAS-No.: 67-56-1	1 - 5
2-Pentanone, 4-methyl-	Hexone / Isobutyl methyl ketone / Isopropylacetone / Methyl isobutyl ketone / 4-Methyl-2-pentanone / 2-Methyl-4- pentanone / 4-Methylpentan-2-one / MIBK / Pentan-2-one, 4-methyl-	CAS-No.: 108-10-1	0.1 - 1

*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

4.1. Description of first aid measures	3
First-aid measures after inhalation	: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.
First-aid measures after skin contact	: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water . Wash contaminated clothing before reuse. Call a POISON CENTER or doctor if you feel unwell.
First-aid measures after eye contact	: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.
4.2. Most important symptoms and e	ffects (acute and delayed)
Symptoms/effects	: May cause damage to organs. Suspected of causing cancer. May damage fertility or the unborn child.
Symptoms/effects after inhalation	: May cause respiratory tract irritation.
Symptoms/effects after skin contact	: Harmful in contact with skin. May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin.
Symptoms/effects after eye contact	: Causes serious eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.
Symptoms/effects after ingestion	: May be harmful if swallowed. May cause stomach distress, nausea or vomiting.
4.3. Immediate medical attention and	special treatment, if necessary
Other medical advice or treatment	: Symptoms may not appear immediately. In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).

5.1. Suitable extinguishing media	
Suitable extinguishing media	: Water spray. Alcohol-resistant foam. Dry chemical. Carbon dioxide.
5.2. Unsuitable extinguishing media	
Unsuitable extinguishing media	: Do not use water jet
5.3. Specific hazards arising from the hazard	dous product
Fire hazard	: Highly flammable liquid and vapour. Products of combustion may include, and are not limited to: oxides of carbon.
Explosion hazard	: May form flammable/explosive vapour-air mixture.

Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

Protection during firefighting	: Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).
6.1. Personal precautions, protec	tive equipment and emergency procedures
General measures	: Use personal protection recommended in Section 8. Isolate the hazard area and deny entry t unnecessary and unprotected personnel. Use special care to avoid static electric charges.
6.2. Methods and materials for co	ntainment and cleaning up
For containment	 Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).

6.3. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection"

7.1. Precautions for safe handling	
Precautions for safe handling	: Obtain special instructions before use. Do not handle until all safety precautions have been rea and understood. Keep away from sources of ignition - No smoking. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapours/spray. Do not swallow. Handle and open container with care. When using do not eat, drink or smoke. Take precautionary measures against static discharge. Use only non-sparking tools.
Hygiene measures	: Take off immediately all contaminated clothing and wash it before reuse. Wash hands before eating, drinking, or smoking.
Additional hazards when processed	: Handle empty containers with care because residual vapours are flammable.
7.2. Conditions for safe storage, incl	uding any incompatibilities
Technical measures	: Proper grounding procedures to avoid static electricity should be followed.
Storage conditions	: Keep out of the reach of children. Keep container tightly closed and in a well-ventilated place. Keep cool. Store locked up.

8.1. Control parameters

Isopropyl alcohol (67-63-0)		
USA - ACGIH - Occupational Exposure Limits		
ACGIH OEL TWA [ppm]	200 ppm	
ACGIH OEL STEL [ppm]	400 ppm	
ACGIH chemical category	Not Classifiable as a Human Carcinogen	
USA - ACGIH - Biological Exposure Indices		
BEI	40 mg/l Parameter: Acetone - Medium: urine - Sampling time: end of shift at end of workweek (background, nonspecific)	

Safety Data Sheet

USA - ACGIH - Occupational Exposure Limits 50 ppm ACGIH OEL TWA (ppm) 50 ppm USA - ACGIH - Occupational Exposure Limits ACGIH OEL TWA (ppm) ACGIH OEL TWA (ppm) 200 ppm ACGIH OEL TWA (ppm) 250 ppm ACGIH CEL TWA (ppm) 250 ppm ACGIH ADDITESTEL (ppm) 250 ppm ACGIH - Biological Exposure Indices 15 mgl Parameter: Methanol - Medium: urine - Sampling time: end of shift (background, nonspecific) 2-Pentanone, 4-methyl- (108-10-1) USA - ACGIH - Occupational Exposure Limits Local name Methyl isoburyl ketone ACGIH OEL STEL (ppm) 20 ppm ACGIH OEL STEL (ppm) 75 ppm Remark (ACGIH) TLV® Basis: URT irr: dizziness; headache. Notations: A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans; BEI ACGIH ADDigical Exposure Indices ACGIH 2021 USA - ACGIH - Biological Exposure Indices MCGIH 2021 USA - ACGIH - Biological Exposure Limits ACGIH 2021 USA - ACGIH - Biological Exposure Indices ACGIH 2021 USA - ACGIH - Biological Exposure Indices ACGIH 2021 USA - ACGIH - Biological Exposure Limits ACGIH 2021 USA - ACGIH - Biological Exposure Limitis ACGIH 2021		
ACGIH OEL TWA [ppm] 50 ppm Methanol (67-56-1) USA - ACGIH - Occupational Exposure Limits ACGIH OEL TWA [ppm] 200 ppm ACGIH CEL TWA [ppm] 250 ppm ACGIH CELTURA [actogory Skin - potential significant contribution to overall exposure by the cutaneous route USA - ACCIH - Biological Exposure Indices EEI BEI 15 mg1 Parameter: Methand - Medium:: urine - Sampling time: end of shift (background, nonspecific) Cacal name Methyl isobutyl ketone ACGIH OEL TYA [ppm] 20 ppm ACGIH OEL TYA [ppm] 75 ppm Remark (ACGIH) TLV® Bass: URT in: dizziness; headache. Notations: A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans); IEI ACGIH cell tradit category Confirmed Animal Carcinogen with Unknown Relevance to Humans Regulatory reference ACGIH 2021 USA - ACGIH - Diological Exposure Indices Local name Local name METHYL ISOBUTYL KETONE BEI 1 mg1 Parameter: MIBK - Medium: urine - Sampling time: end of shift Regulatory reference ACGIH 2021 USA - ACGIH	Diacetone alcohol (123-42-2)	
Methanol (67-56-1) USA - ACGIH - Occupational Exposure Limits ACGIH OEL, TVA [ppm] 200 ppm ACGIH OEL, STEL [ppn] 250 ppm ACGIH AcGIA Category Skin - potential significant contribution to overall exposure by the cutaneous route USA - ACGIH - Biological Exposure Indices 15 mgP Parameter: Methanol - Medium: urine - Sampling time: end of shift (background, nonspecific) 2-Pentanone, 4-methyl- (108-10-1) USA - ACGIH - Occupational Exposure Limits Local name Methyl isobutyl ketone ACGIH OEL, TVA [ppm] 20 ppm ACGIH OEL, TWA [ppm] 20 ppm ACGIH OEL, TWA [ppm] 75 ppm Remark (ACGIH) TLV® Basis: URT irr. diziness: headache. Notations: A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans). BEI ACGIH OEL, TVA [ppm] 75 ppm Requiatory reference ACGIH 2021 USA - ACGIH - Biological Exposure Indices Confirmed Animal Carcinogen with Unknown Relevance to Humans Local name METHYL ISOBUTYL KETONE BEI 1 mgP Parameter: MIBK - Medium: urine - Sampling time: end of shift Regulatory reference ACGIH 2021 USA - ACGIH - Occupational Exposure Limites ACGIH 2021		
USA - ACGIH - Occupational Exposure Limits ACGIH OEL TWA (ppm] 200 ppm ACGIH OEL STEL (ppm) 250 ppm ACGIH CEL STEL (ppm) 250 ppm ACGIH CEL STEL (ppm) 15 mgil Parameter: Methanol - Medium: urine - Sampling time: end of shift (background, nonspecific) BEI 15 mgil Parameter: Methanol - Medium: urine - Sampling time: end of shift (background, nonspecific) 2-Pentanone, 4-methyl- (108-10-1) USA - ACGIH - Occupational Exposure Limits Local name Methyl isobutyl ketone ACGIH OEL TWA (ppm) 20 ppm ACGIH OEL STEL (ppm) 75 ppm Remark (ACGIH) TU-WB pasis: URT Irr, dizziness; headache, Notations: A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans); BEI ACGIH Cel TWA (ppm) 20 ppm ACGIH Cel TWA (ppm) Confirmed Animal Carcinogen with Unknown Relevance to Humans Regulatory reference ACGIH 2021 USA - ACGIH - Stougenze Indices Local name METHYL ISOBUTYL KETONE Ethyl alcohol (64-17-5) USA - ACGIH - Occupational Exposure Limits ACGIH OCLI 2021 USA - ACGIH - Occupational Exposure Limits ACGIH OCLI 2021 USA - ACGIH - Occupational Exposure Limits ACGIH Carcinogen with Unknown Relevance to Humans <t< td=""><td>ACGIH OEL TWA [ppm]</td><td>50 ppm</td></t<>	ACGIH OEL TWA [ppm]	50 ppm
ACGIH OEL TWA (ppm) 200 ppm ACGIH OEL STEL (ppm) 250 ppm ACGIH Hermical category Skin - potential significant contribution to overall exposure by the cutaneous route USA - ACGIH - Biological Exposure Indices 15 mg/l Parameter: Methanol - Medium: urine - Sampling time: end of shift (background, nonspecific) 2-Pentanone, 4-methyl- (108-10-1) USA - ACGIH - Occupational Exposure Limits Local name Methyl isobutyl ketone ACGIH OEL TWA (ppm) 20 ppm ACGIH OEL TWA (ppm) 20 ppm ACGIH OEL STEL (ppm) 75 ppm Remark (ACGIH) TLV® Basis: URT (in: dizziness: headsche. Notations: A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans); BEI ACGIH ACGIH - Biological Exposure Indices Confirmed Animal Carcinogen with Unknown Relevance to Humans Regulatory reference ACGIH 2021 USA - ACGIH - Biological Exposure Indices Use A - ACGIH 2021 USA - ACGIH - Occupational Exposure Limits ACGIH 2021 USA - ACGIH - Occupational Exposure Limits METHYL ISOBUTYL KETONE BEI 1 mg/l Parameter: MIBK - Medium: urine - Sampling time: end of shift Regulatory reference ACGIH 2021 USA - ACGIH - Occupational Exposure Limits Golf Hoccupational Exposure Limits	Methanol (67-56-1)	
ACGIH OEL STEL [ppm] 250 ppm ACGIH chemical category Skin - potential significant contribution to overall exposure by the cutaneous route USA - ACGIH - Biological Exposure Indices 15 mgil Parameter: Methanol - Medium: urine - Sampling time: end of shift (background, nonspecific) 2-Pentanone, 4-methyl- (108-10-1) USA - ACGIH - Occupational Exposure Limits Local name Methyl isobutyl ketone ACGIH OEL TWA [ppm] 20 ppm ACGIH OEL STEL [ppm] 75 ppm Remark (ACGIH) TLV® Basis: URT irr; dizziness; headache. Notations: A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans); BEI ACGIH DEL STEL [ppm] 75 ppm Remark (ACGIH) TLV® Basis: URT irr; dizziness; headache. Notations: A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans); BEI ACGIH DEL STEL [ppm] 76 ppm ACGIH Del biological Exposure Indices ACGIH 2021 USA - ACGIH - Biological Exposure Indices ACGIH 2021 USA - ACGIH - Biological Exposure Indices ACGIH 2021 USA - ACGIH - Occupational Exposure Limits ACGIH 2021 USA - ACGIH - Occupational Exposure Limits ACGIH 2021 Ethyl alcohol (64-17-5) USA - ACGIH - Occupational Exposure Limits ACGIH Cocupational Exposure Limits ACGIH 2021 ACGIH OCcupational Exposure Limits Confirmed Animal Carcinogen with Unknown Relevance to Humans <t< td=""><td>USA - ACGIH - Occupational Exposure Limits</td><td></td></t<>	USA - ACGIH - Occupational Exposure Limits	
ACGIH chemical category Skin - potential significant contribution to overall exposure by the cutaneous route USA - ACGIH - Biological Exposure Indices Ifs mg/l Parameter: Methanol - Medium: urine - Sampling time: end of shift (background, nonspecific) 2-Pentanone, 4-methyl- (108-10-1) USA - ACGIH - Occupational Exposure Limits Local name Methyl isobutyl ketone ACGIH OEL TWA (ppm) 20 ppm ACGIH OEL STEL (ppm) 75 ppm Remark (ACGIH) TLV® Basis: URT irr: dizziness: headache. Notations: A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans); BEI ACGIH oel STEL (ppm) Confirmed Animal Carcinogen with Unknown Relevance to Humans Regulatory reference ACGIH 2021 USA - ACGIH - Biological Exposure Indices In mg/l Parameter: MIBK - Medium: urine - Sampling time: end of shift Regulatory reference ACGIH 2021 USA - ACGIH - Occupational Exposure Limits ACGIH 2021 Regulatory reference ACGIH 2021 USA - ACGIH - Occupational Exposure Limits ACGIH 2021 Regulatory reference ACGIH 2021 USA - ACGIH - Occupational Exposure Limits Confirmed Animal Carcinogen with Unknown Relevance to Humans Regulatory reference ACGIH 2021 USA - ACGIH - Occupational Exposure Limits C	ACGIH OEL TWA [ppm]	200 ppm
USA - ACGH - Biological Exposure Indices 15 mg/l Parameter: Methanol - Medium: urine - Sampling time: end of shift (background, nonspecific) 2-Pentanone, 4-methyl- (108-10-1) USA - ACGH - Occupational Exposure Limits Local name Methyl isobutyl ketone ACGH OEL STEL (ppm) 75 ppm Remark (ACGIH) TU-Vie Basis: URT irr, dizziness; headache. Notations: A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans); BEI ACGH OEL STEL (ppm) 75 ppm Remark (ACGIH) TU-Vie Basis: URT irr, dizziness; headache. Notations: A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans); BEI ACGH obeilda Category Confirmed Animal Carcinogen with Unknown Relevance to Humans Regulatory reference ACGH 2021 USA - ACGH - Biological Exposure Indices In gr/l Parameter: MIBK - Medium: urine - Sampling time: end of shift Regulatory reference ACGH 2021 USA - ACGH - Occupational Exposure Limits ACGIH 2021 USA - ACGIH - Occupational Exposure Limits ACGIH 2021 Coff CEL STEL (ppm) 1000 ppm ACGIH - Occupational Exposure Limits ACGIH 2021 Ethyl alcohol (64-17-5) USA - ACGIH - Occupational Exposure Limits ACGIH - Decupational Exposure Limits Confirmed Animal Carcinogen with Unknown Relevance to Humans	ACGIH OEL STEL [ppm]	250 ppm
BEI 15 mg/l Parameter: Methanol - Medium: urine - Sampling time: end of shift (background, nonspecific) 2-Pentanone, 4-methyl- (108-10-1) USA - ACGIH - Occupational Exposure Limits Local name Methyl isobutyl ketone ACGIH OEL STEL [ppm] 20 ppm ACGIH OEL STEL [ppm] 75 ppm Remark (ACGIH) TL Vie Basis: URT irr; dizziness; headache. Notations: A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans); BEI ACGIH chemical category Confirmed Animal Carcinogen with Unknown Relevance to Humans Regulatory reference ACGIH 2021 USA - ACGIH - Biological Exposure Indices Use ACGIH 2021 Local name METHYL ISOBUTYL KETONE BEI 1 mg/l Parameter: MIBK - Medium: urine - Sampling time: end of shift Regulatory reference ACGIH 2021 USA - ACGIH - Docupational Exposure Limits ACGIH 2021 USA - ACGIH - Occupational Exposure Limits ACGIH 2021 Confirmed Animal Carcinogen with Unknown Relevance to Humans 8.2 ACGIH OCL Stell [ppm] 1000 ppm ACGIH OCL Stell [ppm] 1000 ppm ACGIH Category Confirmed Animal Carcinogen with Unknown Relevance to Humans 8.2. Appropriate engineering controls : Use ventilation adequate to keep exposures	ACGIH chemical category	Skin - potential significant contribution to overall exposure by the cutaneous route
anonspecific) 2-Pentanone, 4-methyl- (108-10-1) USA - ACGIH - Occupational Exposure Limits Local name Methyl isobutyl ketone ACGIH OEL TWA [ppm] 20 ppm ACGIH OEL STEL [ppm] 75 ppm Remark (ACGIH) TLV® Basis: URT irr; dizziness; headache. Notations: A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans); BEI ACGIH chemical category Confirmed Animal Carcinogen with Unknown Relevance to Humans Regulatory reference ACGIH 2021 USA - ACGIH - Biological Exposure Indices Local name Local name METHYL ISOBUTYL KETONE BEI 1 mg/l Parameter: MIBK - Medium: urine - Sampling time: end of shift Regulatory reference ACGIH 2021 USA - ACGIH - Occupational Exposure Limits ACGIH 2021 ACGIH Occupational Exposure Limits Confirmed Animal Carcinogen with Unknown Relevance to Humans ACGIH Occupational Exposure Limits ACGIH 2021 ACGIH Occupational Exposure Limits Confirmed Animal Carcinogen with Unknown Relevance to Humans ACGIH Occupational Exposure Limits Provide reading accessible eye wash stations and safety showers. Use explosion-proof electrical (ventidition, lighting and material handing) equipment. Scal Actif - Occupational Exposure Limits Evolde reading	USA - ACGIH - Biological Exposure Indices	
USA - ACGIH - Occupational Exposure Limits Local name Methyl isobutyl ketone ACGIH OEL TWA [ppm] 20 ppm ACGIH OEL STEL [ppm] 75 ppm Remark (ACGIH) TLV® Basis: URT irr, dizziness; headache. Notations: A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans); BEI ACGIH chemical category Confirmed Animal Carcinogen with Unknown Relevance to Humans? Regulatory reference ACGIH 2021 USA - ACGIH - Biological Exposure Indices Local name Local name METHYL ISOBUTYL KETONE BEI 1 mg/l Parameter: MIBK - Medium: urine - Sampling time: end of shift Regulatory reference ACGIH 2021 USA - ACGIH - Occupational Exposure Limits ACGIH 2021 Ethyl lacohol (64-17-5) USA - ACGIH - Occupational Exposure Limits ACGIH OCL STEL [ppm] 1000 ppm ACGIH OCL STEL [ppm] 1000 ppm ACGIH concupational Exposure Limits Luse ventilation adequate to keep exposures (alrborne levels of dust, fume, vapor, etc.) below recommended exposure limits. Provide readiy accessible ey wash stations and safety showers. Use explosion-proro letectical (ventilation, lighting and material handling equipment Environmental exposure controls Environmental exposure controls : Maintain levels below Community environmental protection thresholds. <tr< td=""><td>BEI</td><td></td></tr<>	BEI	
Lacal name Methyl isobutyl ketone ACGIH OEL TWA [ppm] 20 ppm ACGIH OEL STEL [ppm] 75 ppm Remark (ACGIH) TL/V® Basis: URT irr; dizziness; headache. Notations: A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans); BEI ACGIH chemical category Confirmed Animal Carcinogen with Unknown Relevance to Humans); BEI ACGIH chemical category Confirmed Animal Carcinogen with Unknown Relevance to Humans Regulatory reference ACGIH 2021 USA - ACGIH - Biological Exposure Indices METHYL ISOBUTYL KETONE BEI 1 mg/l Parameter: MIBK - Medium: urine - Sampling time: end of shift Regulatory reference ACGIH 2021 USA - ACGIH - Occupational Exposure Limits ACGIH 2021 Ethyl alcohol (64-17-5) USA - ACGIH - Occupational Exposure Limits ACGIH OEL STEL [ppm] 1000 ppm ACGIH chemical category Confirmed Animal Carcinogen with Unknown Relevance to Humans 8.2. Appropriate engineering controls : Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits. Provide readily accessible eyew satistations and safety showers. Use explosion-proro lectrical (ventilating, lighting and material handing) equipment. Environmental exposure controls : Use ventilation adequate to keep exposures (airborne levels of dust, fume,	2-Pentanone, 4-methyl- (108-10-1)	
ACGIH OEL TWA [ppm] 20 ppm ACGIH OEL STEL [ppm] 75 ppm Remark (ACGIH) TLV® Basis: URT irr; dizziness; headache. Notations: A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans); BEI ACGIH chemical category Confirmed Animal Carcinogen with Unknown Relevance to Humans Regulatory reference ACGIH 2021 USA - ACGIH - Biological Exposure Indices Local name BEI 1 mg/l Parameter: MIBK - Medium: urine - Sampling time: end of shift Regulatory reference ACGIH 2021 USA - ACGIH - Occupational Exposure Limits ACGIH 2021 ACGIH OLL STEL [ppm] 1 000 ppm ACGIH OLL STEL [ppm] 1000 ppm ACGIH chemical category Confirmed Animal Carcinogen with Unknown Relevance to Humans ACGIH chemical category Confirmed Animal Carcinogen with Unknown Relevance to Humans ACGIH OLL STEL [ppm] 1000 ppm ACGIH chemical category Confirmed Animal Carcinogen with Unknown Relevance to Humans 8.2. Appropriate engineering controls Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits. Provide readily accessible eye wash stations and safety showers. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Appropriate engineering controls	USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL STEL [ppm] 75 ppm Remark (ACGIH) TLV® Basis: URT irr; dizziness; headache. Notations: A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans); BEI ACGIH chemical category Confirmed Animal Carcinogen with Unknown Relevance to Humans Regulatory reference ACGIH 2021 USA - ACGIH - Biological Exposure Indices Environmental Carcinogen with Unknown Relevance to Humans Local name METHYL ISOBUTYL KETONE BEI 1 mg/ Parameter: MIBK - Medium: urine - Sampling time: end of shift Regulatory reference ACGIH 2021 Ethyl alcohol (64-17-5) USA - ACGIH - Occupational Exposure Limits ACGIH OEL STEL [ppm] 1000 ppm ACGIH OEL stps [pom] 1000 ppm ACGIH chemical category Confirmed Animal Carcinogen with Unknown Relevance to Humans 8.2. Appropriate engineering controls : Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits. Provide readily accessible eye wash stations and safety showers. Use explosion-proof electrical (ventilating, lighting and material handling) equipment Environmental exposure controls : Maintain levels below Community environmental protection thresholds. 8.3. Individual protection measures/Personal protective equipment Hand protection: Wear chemically resistant protective glove	Local name	Methyl isobutyl ketone
Remark (ACGIH) TLV® Basis: URT irr; dizziness; headache. Notations: A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans); BEI ACGIH chemical category Confirmed Animal Carcinogen with Unknown Relevance to Humans Regulatory reference ACGIH 2021 USA - ACGIH - Biological Exposure Indices Local name Local name METHYL ISOBUTYL KETONE BEI 1 mg/l Parameter: MIBK - Medium: urine - Sampling time: end of shift Regulatory reference ACGIH 2021 Ethyl alcohol (64-17-5) USA - ACGIH - Occupational Exposure Limits ACGIH - DE Locat ategory Confirmed Animal Carcinogen with Unknown Relevance to Humans ACGIH - Occupational Exposure Limits ACGIH 2021 ACGIH - Occupational Exposure Limits ACGIH 2021 ACGIH - Occupational Exposure Limits Confirmed Animal Carcinogen with Unknown Relevance to Humans ACGIH - Occupational Exposure Limits Confirmed Animal Carcinogen with Unknown Relevance to Humans 8.2. Appropriate engineering controls : Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits. Provide readily accessible eye wash stations and safety showers. Use explosion-proof electrical (ventilating, lighting and material handling) equipment Environmental exposure controls : Maintain levels below Community environmental protection thresholds. </td <td>ACGIH OEL TWA [ppm]</td> <td>20 ppm</td>	ACGIH OEL TWA [ppm]	20 ppm
ACGIH chemical category Confirmed Animal Carcinogen with Unknown Relevance to Humans Regulatory reference ACGIH 2021 USA - ACGIH - Biological Exposure Indices Local name Local name METHYL ISOBUTYL KETONE BEI 1 mg/l Parameter: MIBK - Medium: urine - Sampling time: end of shift Regulatory reference ACGIH 2021 Ethyl alcohol (64-17-5) USA - ACGIH - Occupational Exposure Limits ACGIH - Occupational Exposure Limits 1000 ppm ACGIH - Category Confirmed Animal Carcinogen with Unknown Relevance to Humans 8.2. Appropriate engineering controls : Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits. Provide readily accessible eye wash stations and safety showers. Use explosion-proof electrical (ventilating, lighting and material handling) equipment Environmental exposure controls : Maintain levels below Community environmental protection thresholds. 8.3. Individual protection measures/Personal protective equipment Hand protection: Wear chemically resistant protective gloves. Eight protection:	ACGIH OEL STEL [ppm]	75 ppm
Regulatory reference ACGIH 2021 USA - ACGIH - Biological Exposure Indices METHYL ISOBUTYL KETONE Local name METHYL ISOBUTYL KETONE BEI 1 mg/l Parameter: MIBK - Medium: urine - Sampling time: end of shift Regulatory reference ACGIH 2021 Ethyl alcohol (64-17-5) USA - ACGIH - Occupational Exposure Limits ACGIH OEL STEL [ppm] 1000 ppm ACGIH chemical category Confirmed Animal Carcinogen with Unknown Relevance to Humans 8.2. Appropriate engineering controls : Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits. Provide readily accessible eye wash stations and safety showers. Use explosion-proof electrical (ventilating, lighting and material handling) equipment Environmental exposure controls : Maintain levels below Community environmental protection thresholds. 8.3. Individual protection measures/Personal protective equipment Hand protection: Wear chemically resistant protective gloves. Eye protection:	Remark (ACGIH)	
USA - ACGIH - Biological Exposure Indices Local name METHYL ISOBUTYL KETONE BEI 1 mg/l Parameter: MIBK - Medium: urine - Sampling time: end of shift Regulatory reference ACGIH 2021 Ethyl alcohol (64-17-5) USA - ACGIH - Occupational Exposure Limits ACGIH OEL STEL [ppm] 1000 ppm ACGIH chemical category Confirmed Animal Carcinogen with Unknown Relevance to Humans 8.2. Appropriate engineering controls Appropriate engineering controls Etylosion-proof electrical (ventilating, lighting and material handling) equipment Environmental exposure controls 8.3. Individual protection measures/Personal protective equipment Hand protection: Eye protection:	ACGIH chemical category	Confirmed Animal Carcinogen with Unknown Relevance to Humans
Local name METHYL ISOBUTYL KETONE BEI 1 mg/l Parameter: MIBK - Medium: urine - Sampling time: end of shift Regulatory reference ACGIH 2021 Ethyl alcohol (64-17-5) USA - ACGIH - Occupational Exposure Limits ACGIH OEL STEL [ppm] 1000 ppm ACGIH chemical category Confirmed Animal Carcinogen with Unknown Relevance to Humans 8.2. Appropriate engineering controls : Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits. Provide readily accessible eye wash stations and safety showers. Use explosion-proof electrical (ventilating, lighting and material handling) equipment Environmental exposure controls : Maintain levels below Community environmental protection thresholds. 8.3. Individual protection measures/Personal protective equipment Hand protection: Wear chemically resistant protective gloves. Eye protection:	Regulatory reference	ACGIH 2021
BEI 1 mg/l Parameter: MIBK - Medium: urine - Sampling time: end of shift Regulatory reference ACGIH 2021 Ethyl alcohol (64-17-5) USA - ACGIH - Occupational Exposure Limits ACGIH OEL STEL [ppm] 1000 ppm ACGIH chemical category Confirmed Animal Carcinogen with Unknown Relevance to Humans 8.2. Appropriate engineering controls Confirmed Animal Carcinogen with Unknown Relevance to Humans APpropriate engineering controls : Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits. Provide readily accessible eye wash stations and safety showers. Use explosion-proof electrical (ventilating, lighting and material handling) equipment Environmental exposure controls : Maintain levels below Community environmental protection thresholds. 8.3. Individual protection measures/Personal protective equipment Hand protection: Wear chemically resistant protective gloves. Eye protection:	USA - ACGIH - Biological Exposure Indices	
Regulatory reference ACGIH 2021 Ethyl alcohol (64-17-5) USA - ACGIH - Occupational Exposure Limits ACGIH OEL STEL [ppm] 1000 ppm ACGIH chemical category Confirmed Animal Carcinogen with Unknown Relevance to Humans 8.2. Appropriate engineering controls Confirmed Animal Carcinogen with Unknown Relevance to Humans Appropriate engineering controls : Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits. Provide readily accessible eye wash stations and safety showers. Use explosion-proof electrical (ventilating, lighting and material handling) equipment Environmental exposure controls : Maintain levels below Community environmental protection thresholds. 8.3. Individual protection measures/Personal protective equipment Hand protection: Wear chemically resistant protective gloves. Eye protection:	Local name	METHYL ISOBUTYL KETONE
Ethyl alcohol (64-17-5) USA - ACGIH - Occupational Exposure Limits ACGIH OEL STEL [ppm] 1000 ppm ACGIH chemical category Confirmed Animal Carcinogen with Unknown Relevance to Humans 8.2. Appropriate engineering controls Appropriate engineering controls Invironmental exposure controls Invironmental exposure controls S.3. Individual protection measures/Personal protective equipment Hand protection: Wear chemically resistant protective gloves.	BEI	1 mg/l Parameter: MIBK - Medium: urine - Sampling time: end of shift
USA - ACGIH - Occupational Exposure Limits ACGIH OEL STEL [ppm] 1000 ppm ACGIH chemical category Confirmed Animal Carcinogen with Unknown Relevance to Humans 8.2. Appropriate engineering controls Every station adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits. Provide readily accessible eye wash stations and safety showers. Use explosion-proof electrical (ventilating, lighting and material handling) equipment Environmental exposure controls Maintain levels below Community environmental protection thresholds. 8.3. Individual protection measures/Personal protective equipment Hand protection: Wear chemically resistant protective gloves.	Regulatory reference	ACGIH 2021
ACGIH OEL STEL [ppm] 1000 ppm ACGIH chemical category Confirmed Animal Carcinogen with Unknown Relevance to Humans 8.2. Appropriate engineering controls Second Animal Carcinogen with Unknown Relevance to Humans Appropriate engineering controls : Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits. Provide readily accessible eye wash stations and safety showers. Use explosion-proof electrical (ventilating, lighting and material handling) equipment Environmental exposure controls : Maintain levels below Community environmental protection thresholds. 8.3. Individual protection measures/Personal protective equipment Hand protection: Eye protection:	Ethyl alcohol (64-17-5)	
ACGIH chemical category Confirmed Animal Carcinogen with Unknown Relevance to Humans 8.2. Appropriate engineering controls	USA - ACGIH - Occupational Exposure Limits	
8.2. Appropriate engineering controls Appropriate engineering controls : Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits. Provide readily accessible eye wash stations and safety showers. Use explosion-proof electrical (ventilating, lighting and material handling) equipment Environmental exposure controls : Maintain levels below Community environmental protection thresholds. 8.3. Individual protection measures/Personal protective equipment Hand protection: Wear chemically resistant protective gloves. Eye protection:	ACGIH OEL STEL [ppm]	1000 ppm
Appropriate engineering controls : Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits. Provide readily accessible eye wash stations and safety showers. Use explosion-proof electrical (ventilating, lighting and material handling) equipment Environmental exposure controls : Maintain levels below Community environmental protection thresholds. 8.3. Individual protection measures/Personal protective equipment Hand protection: Wear chemically resistant protective gloves. Eye protection:	ACGIH chemical category	Confirmed Animal Carcinogen with Unknown Relevance to Humans
recommended exposure limits. Provide readily accessible eye wash stations and safety showers. Use explosion-proof electrical (ventilating, lighting and material handling) equipment Maintain levels below Community environmental protection thresholds. 8.3. Individual protection measures/Personal protective equipment Hand protection: Wear chemically resistant protective gloves. Eye protection:	8.2. Appropriate engineering controls	
Environmental exposure controls : Maintain levels below Community environmental protection thresholds. 8.3. Individual protection measures/Personal protective equipment Hand protection: Wear chemically resistant protective gloves. Eye protection:	Appropriate engineering controls	recommended exposure limits. Provide readily accessible eye wash stations and safety showers.
Hand protection: Wear chemically resistant protective gloves. Eye protection:	Environmental exposure controls	
Wear chemically resistant protective gloves. Eye protection:	8.3. Individual protection measures/Persona	I protective equipment
Eye protection:	Hand protection:	
	Wear chemically resistant protective gloves.	
Wear approved eye protection (properly fitted dust- or splash-proof chemical safety goggles) and face protection (face shield).	Eye protection:	
	Wear approved eye protection (properly fitted dust- o	r splash-proof chemical safety goggles) and face protection (face shield).

Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

Skin and body protection:	
Wear suitable protective clothing	

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Other information:

Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking. Handle according to established industrial hygiene and safety practices.

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: No data available.
Colour	: No data available
Odour	: No data available
Odour threshold	: No data available
рН	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Relative evaporation rate (ether=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: 63 – 83 °C
Flash point	: 4 °C
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Highly flammable liquid and vapour.
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Solubility	: No data available
Partition coefficient n-octanol/water	: No data available
Viscosity, kinematic	: No data available
Explosive limits	: No data available

9.2. Other information

No additional information available

Reactivity	: No additional information available
Chemical stability	: Stable under normal storage conditions. May form flammable/explosive vapour-air mixture
Possibility of hazardous reactions	: No dangerous reaction known under conditions of normal use.
Conditions to avoid	: Heat. Incompatible materials. Sources of ignition.
Incompatible materials	: Strong oxidizers.
Hazardous decomposition products	: May include, and are not limited to: oxides of carbon. May release flammable gases.

Safety Data Sheet

11.1. Information on toxicological effects	
Acute toxicity (oral) Acute toxicity (dermal) Acute toxicity (inhalation)	 Not classified. Harmful in contact with skin. Not classified.
ATE CA (Dermal)	1100 mg/kg bodyweight
Unknown acute toxicity (GHS CA)	90% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal)
Isopropyl alcohol (67-63-0)	
LD50 oral rat	5840 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 dermal rabbit	4059 mg/kg
LC50 inhalation rat	> 10000 ppm (Exposure time: 6 h)
ATE CA (oral)	5840 mg/kg bodyweight
ATE CA (Dermal)	4059 mg/kg bodyweight
Diacetone alcohol (123-42-2)	
LD50 oral rat	> 4 g/kg
LD50 dermal rat	> 1875 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LD50 dermal rabbit	13630 mg/kg
ATE CA (Dermal)	1100 mg/kg bodyweight
Methanol (67-56-1)	
LD50 oral rat	1187 – 2769 mg/kg bodyweight Animal: rat
LD50 dermal rabbit	15840 mg/kg
LC50 inhalation rat	22500 ppm (Exposure time: 8 h)
ATE CA (oral)	100 mg/kg bodyweight
ATE CA (Dermal)	15840 mg/kg bodyweight
ATE CA (Gases (except aerosol dispensers and lighters))	700 ppmv/4h
ATE CA (vapours)	3 mg/l/4h
ATE CA (dust,mist)	0.5 mg/l/4h
2-Pentanone, 4-methyl- (108-10-1)	
LD50 oral rat	2080 mg/kg
LD50 dermal rabbit	3000 mg/kg
LC50 inhalation rat	11.6 mg/l air Animal: rat, Animal sex: male, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity)
LC50 inhalation rat	2000 – 4000 ppm/4h
ATE CA (oral)	2080 mg/kg bodyweight
ATE CA (Dermal)	3000 mg/kg bodyweight
ATE CA (Gases (except aerosol dispensers and lighters))	2000 ppmv/4h

Safety Data Sheet

2-Pentanone, 4-methyl- (108-10-1)	2-Pentanone, 4-methyl- (108-10-1)				
ATE CA (vapours)	11 mg/l/4h				
ATE CA (dust,mist)	1.5 mg/l/4h				
Ethyl alcohol (64-17-5)					
LD50 oral rat	15010 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 401 (Acute Oral Toxicity), 95% CL: 14450 - 15560				
LD50 oral	8300 mg/kg bodyweight Animal: mouse				
LC50 inhalation rat	133.8 mg/l/4h				
ATE CA (oral)	8300 mg/kg bodyweight				
ATE CA (vapours)	133.8 mg/l/4h				
ATE CA (dust,mist)	133.8 mg/l/4h				
Skin corrosion/irritation:Serious eye damage/irritation:Respiratory or skin sensitization:Germ cell mutagenicity:Carcinogenicity:	Not classified. Causes serious eye irritation. Not classified. Not classified. Suspected of causing cancer.				
Isopropyl alcohol (67-63-0)					
IARC group	3 - Not classifiable				
2-Pentanone, 4-methyl- (108-10-1)					
IARC group	2B - Possibly carcinogenic to humans				
National Toxicology Program (NTP) Status	1 - Evidence of Carcinogenicity				
Reproductive toxicity :	May damage fertility or the unborn child.				
Methanol (67-56-1)					
NOAEL (animal/male, F0/P)	< 1000 mg/kg bodyweight Animal: mouse, Animal sex: male				
STOT-single exposure :	Inhalation, ingestion or skin absorption of methanol can cause significant disturbances in vision, including blindness.				
Isopropyl alcohol (67-63-0)					
STOT-single exposure	May cause drowsiness or dizziness.				
Methanol (67-56-1)					
STOT-single exposure	Causes damage to organs. May cause drowsiness or dizziness.				
2-Pentanone, 4-methyl- (108-10-1)					
STOT-single exposure	May cause respiratory irritation.				
STOT-repeated exposure :	Not classified.				
Diacetone alcohol (123-42-2)					
LOAEL (oral, rat, 90 days)	1000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)				
NOAEL (oral, rat, 90 days)	250 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)				
NOAEC (inhalation, rat, vapour, 90 days)	≥ 4.106 mg/l air Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study)				

Safety Data Sheet

2-Pentanone, 4-methyl- (108-10-1)	
LOAEL (oral, rat, 90 days)	1000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)
NOAEL (oral, rat, 90 days)	250 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)
NOAEC (inhalation, rat, vapour, 90 days)	4.106 mg/l air Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90- Day Study)
Ethyl alcohol (64-17-5)	
LOAEL (oral, rat, 90 days)	3200 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
NOAEL (oral, rat, 90 days)	1730 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents), Remarks on results: other:
NOAEL (subchronic, oral, animal/male, 90 days)	< 9700 mg/kg bodyweight Animal: mouse, Animal sex: male, Guideline: EPA OPPTS 870.3100 (90-Day Oral Toxicity in Rodents)
NOAEL (subchronic, oral, animal/female, 90 days)	 > 9400 mg/kg bodyweight Animal: mouse, Animal sex: female, Guideline: EPA OPPTS 870.3100 (90-Day Oral Toxicity in Rodents)
Aspiration hazard	: Not classified.
Symptoms/effects	: May cause damage to organs. Suspected of causing cancer. May damage fertility or the unborn child.
Symptoms/effects after inhalation	: May cause respiratory tract irritation.
Symptoms/effects after skin contact	: Harmful in contact with skin. May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin.
Symptoms/effects after eye contact	: Causes serious eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.
Symptoms/effects after ingestion	: May be harmful if swallowed. May cause stomach distress, nausea or vomiting.

40.4		1
12.1	. Tox	ICITV

Hazardous to the aquatic environment, short-term : (acute)	May cause long-term adverse effects in the aquatic environment. Not classified. Not classified.	
Isopropyl alcohol (67-63-0)		
LC50 - Fish [1]	10000 mg/l Test organisms (species): Pimephales promelas	
LC50 - Fish [2]	9640 mg/l Test organisms (species): Pimephales promelas	
EC50 - Crustacea [1]	13299 mg/l (Exposure time: 48 h - Species: Daphnia magna)	
EC50 72h - Algae [1]	> 1000 mg/l (Species: Desmodesmus subspicatus)	
EC50 96h - Algae [1]	> 1000 mg/l (Species: Desmodesmus subspicatus)	
Partition coefficient n-octanol/water	0.05 (at 25 °C)	
Diacetone alcohol (123-42-2)		
LC50 - Fish [1]	420 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])	
LC50 - Fish [2]	420 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus)	
EC50 - Crustacea [1]	> 1000 mg/l Test organisms (species): Daphnia magna	

Safety Data Sheet

ous names:		
vious names:		
vious names:		
Trade Secret Markers		

Safety Data Sheet

Trade Secret Markers Not established. Bloecommulative potential Not established. Isopropyl alcohol (67-63-0) 0.05 (at 25 °C) Diacetone alcohol (123-42-2) Partition coefficient n-octanol/water 1.03 Methanol (67-56-1) 0.07 (at 25 °C) Partition coefficient n-octanol/water 0.07 (at 25 °C) Partition coefficient n-octanol/water 0.07 (at 25 °C) Partition coefficient n-octanol/water 0.07 (at 25 °C) Partition coefficient n-octanol/water 1.19 Partition coefficient n-octanol/water 0.32 Partition coefficient n-octanol/water -0.32 Partition coefficient n-octanol/water -0.32 Partition coefficient n-octanol/water 0.05 (at 25 °C) Partition coefficient n-octanol/water 1.03 Methanol (67-63-0) Partition coefficient n-octanol/water 1.03 Methanol (67-66-1) Partition coefficient n-octanol/water 1.03 Methanol (67-66-1) Partition coefficient n-octanol/water 1.03 Partition coefficient n-octanol/water 1.03 Methanol (67-66-1) Partition coefficient n-octanol/water 1.03 Partition coefficient n-octanol/water 1.03 Methanol (64-17-5) Partition coefficient n-octanol/water 1.03 <t< th=""><th>12.3. Bioaccumulative potential</th><th></th></t<>	12.3. Bioaccumulative potential	
Isopropyl alcohol (67-63-0) Partition coefficient n-octanol/water 0.05 (at 25 °C) Diacetone alcohol (123-42-2) Partition coefficient n-octanol/water 1.03 Methanol (67-56-1) ECF - Fish (1) Partition coefficient n-octanol/water -0.77 Partition coefficient n-octanol/water -0.77 Partition coefficient n-octanol/water 1.19 Ethyl alcohol (64-17-5) Partition coefficient n-octanol/water Partition coefficient n-octanol/water -0.32 12.4. Mobility in soil Isopropyl alcohol (67-63-0) Partition coefficient n-octanol/water 0.05 (at 25 °C) Diacetone alcohol (123-42-2) Partition coefficient n-octanol/water Partition coefficient n-octanol/water 1.03 Methanol (67-56-1) Partition coefficient n-octanol/water Partition coefficient n-octanol/water -0.77 Partition coefficient n-octanol/water -0.32 Partition coefficient n-octanol/water 1.19 Ethyl alcohol (64-17-5) Partition coefficient n-octanol/water Partition coefficient n-octanol/water 1.32 Partition coefficient n-octanol/water -0.32 <td>Trade Secret Markers</td> <td></td>	Trade Secret Markers	
Partition coefficient n-octanol/water 0.05 (at 25 °C) Diacetone alcohol (123-42-2) Partition coefficient n-octanol/water 1.03 Methanol (67-56-1) 3CF - Fish [1] <10 Partition coefficient n-octanol/water 0.77 2-Pentanone, 4-methyl- (108-10-1) Partition coefficient n-octanol/water 1.19 Ethyl alcohol (64-17-5) Partition coefficient n-octanol/water 0.05 (at 25 °C) Diacetone alcohol (123-42-2) Partition coefficient n-octanol/water 1.03 Methanol (67-68-0) Partition coefficient n-octanol/water 0.05 (at 25 °C) Diacetone alcohol (123-42-2) Partition coefficient n-octanol/water 1.03 Methanol (67-56-1) Partition coefficient n-octanol/water 0.0.77 2-Pentanone, 4-methyl- (108-10-1) Partition coefficient n-octanol/water 1.19 Ethyl alcohol (64-17-5) Partition coefficient n-octanol/water 1.19 Ethyl alcohol (64-17-5) Partition coefficient n-octanol/water 1.03 Methanol (67-56-1) Partition coefficient n-octanol/water 1.19 Ethyl alcohol (64-17-5) Partition coefficient n-octanol/water 1.0.32 IZS. Other adverse effects IZ: Notice II: This material must be disposed of in accordance with all local, state, provincial, and federal regulations. The generation of waste should be avoided or minimized wherever possible.	Bioaccumulative potential	Not established.
Partition coefficient n-octanol/water 1.03 Methanol (67-56-1) BCF - Fish [1] < 10 Partition coefficient n-octanol/water 0.77 2-Pentanone, 4-methyl- (108-10-1) Partition coefficient n-octanol/water 1.19 Ethyl alcohol (64-17-5) Partition coefficient n-octanol/water 0.32 12.4. Mobility in soil Isopropyl alcohol (67-63-0) Partition coefficient n-octanol/water 1.03 Methanol (67-56-1) Partition coefficient n-octanol/water 1.19 Ethyl alcohol (64-17-5) Partition coefficient n-octanol/water 1.03 Methanol (57-56-1) Partition coefficient n-octanol/water 1.19 Ethyl alcohol (64-17-5) Partition coefficient n-octanol/water 1.19 Ethyl alcohol (64-17-5) Partition coefficient n-octanol/water 1.19 Ethyl alcohol (64-17-5) Partition coefficient n-octanol/water 1.32 Iz.5. Other adverse effects Iz.5. Other adverse effects Partition coefficient n-octanol/water 1.19 Ethyl alcohol (64-17-5) Partition coefficient n-octanol/water 1.19 Ethyl alcohol (64-17-5) Partition coefficient n-octanol/water 1.32 Iz.5. Other adverse effects Iz.5. Other adverse effects Partition coefficient n-octanol/water 1.53 Partition coeffici	Isopropyl alcohol (67-63-0)	
Partition coefficient n-octanol/water 1.03 Methanol (67-56-1) BCF - Fish [1] < 10 Partition coefficient n-octanol/water -0.77 2-Pentanone, 4-methyl- (108-10-1) Partition coefficient n-octanol/water -0.32 Ethyl alcohol (64-17-5) Partition coefficient n-octanol/water -0.32 Ethyl alcohol (67-63-0) Partition coefficient n-octanol/water 0.05 (at 25 °C) Diacetone alcohol (123-42-2) Partition coefficient n-octanol/water 1.03 Methanol (67-56-1) Partition coefficient n-octanol/water -0.77 2-Pentanone, 4-methyl- (108-10-1) Partition coefficient n-octanol/water -0.77 2-Pentanone, 4-methyl- (108-10-1) Partition coefficient n-octanol/water -0.32 Ethyl alcohol (64-17-5) Partition coefficient	Partition coefficient n-octanol/water	0.05 (at 25 °C)
Methanol (67-56-1) BCF - Fish [1] < 10	Diacetone alcohol (123-42-2)	
BCF - Fish [1] < 10	Partition coefficient n-octanol/water	1.03
Partition coefficient n-octanol/water 0.77 2-Pentanone, 4-methyl- (108-10-1) Partition coefficient n-octanol/water 1.19 Ethyl alcohol (64-17-5) Partition coefficient n-octanol/water 0.32 12.4. Mobility in soil Isopropyl alcohol (67-63-0) Partition coefficient n-octanol/water 0.05 (at 25 °C) Diacetone alcohol (123-42-2) Partition coefficient n-octanol/water 1.03 Methanol (67-56-1) Partition coefficient n-octanol/water 0.77 2-Pentanone, 4-methyl- (108-10-1) Partition coefficient n-octanol/water 1.19 Ethyl alcohol (64-17-5) Partition coefficient n-octanol/water 0.77 2-Pentanone, 4-methyl- (108-10-1) Partition coefficient n-octanol/water 1.19 Ethyl alcohol (64-17-5) Partition coefficient n-octanol/water 0.32 12.5. Other adverse effects Jzone : Not classified. ISI. Disposal methods Product/Packaging disposal recommendations : This material must be disposed of in accordance with all local, state, provincial, and federal regulations. The generation of waste should be avoided or minimized wherever possible.	Methanol (67-56-1)	
2-Pentanone, 4-methyl- (108-10-1) Partition coefficient n-octanol/water Ethyl alcohol (64-17-5) Partition coefficient n-octanol/water 1.19 12.4. Mobility in soil Isopropyl alcohol (67-63-0) Partition coefficient n-octanol/water 0.05 (at 25 °C) Diacetone alcohol (123-42-2) Partition coefficient n-octanol/water 1.03 Methanol (67-56-1) Partition coefficient n-octanol/water 0.77 2-Pentanone, 4-methyl- (108-10-1) Partition coefficient n-octanol/water 1.19 Ethyl alcohol (64-17-5) Partition coefficient n-octanol/water 2.5 Other adverse effects Partitio	BCF - Fish [1]	< 10
Partition coefficient n-octanol/water 1.19 Ethyl alcohol (64-17-5) Partition coefficient n-octanol/water -0.32 It2.4. Mobility in soil Isopropyl alcohol (67-63-0) Partition coefficient n-octanol/water 0.05 (at 25 °C) Diacetone alcohol (123-42-2) Partition coefficient n-octanol/water 1.03 Methanol (67-56-1) Partition coefficient n-octanol/water -0.77 2-Pentanone, 4-methyl- (108-10-1) Partition coefficient n-octanol/water 1.19 Ethyl alcohol (64-17-5) Partition coefficient n-octanol/water -0.32 It3.1. Disposal methods Product/Packaging disposal recommendations : This material must be disposed of in accordance with all local, state, provincial, and federal regulations. The generation of waste should be avoided or minimized wherever possible.	Partition coefficient n-octanol/water	-0.77
Ethyl alcohol (64-17-5) Partition coefficient n-octanol/water -0.32 12.4. Mobility in soil	2-Pentanone, 4-methyl- (108-10-1)	
Partition coefficient n-octanol/water -0.32 Isopropyl alcohol (67-63-0) Partition coefficient n-octanol/water 0.05 (at 25 °C) Diacetone alcohol (123-42-2) Partition coefficient n-octanol/water 1.03 Methanol (67-56-1) Partition coefficient n-octanol/water -0.77 2-Pentanone, 4-methyl- (108-10-1) Partition coefficient n-octanol/water 1.19 Ethyl alcohol (64-17-5) Partition coefficient n-octanol/water -0.32 12.5. Other adverse effects Dzone : Not classified. I3.1. Disposal methods : This material must be disposed of in accordance with all local, state, provincial, and federal regulations. The generation of waste should be avoided or minimized wherever possible.	Partition coefficient n-octanol/water	1.19
I2.4. Mobility in soil Isopropyl alcohol (67-63-0) Partition coefficient n-octanol/water 0.05 (at 25 °C) Diacetone alcohol (123-42-2) Partition coefficient n-octanol/water 1.03 Methanol (67-56-1) Partition coefficient n-octanol/water -0.77 2-Pentanone, 4-methyl- (108-10-1) Partition coefficient n-octanol/water 1.19 Ethyl alcohol (64-17-5) Partition coefficient n-octanol/water -0.32 12.5. Other adverse effects Dzone : Not classified. I3.1. Disposal methods : This material must be disposed of in accordance with all local, state, provincial, and federal regulations. The generation of waste should be avoided or minimized wherever possible.	Ethyl alcohol (64-17-5)	
Isopropyl alcohol (67-63-0) Partition coefficient n-octanol/water 0.05 (at 25 °C) Diacetone alcohol (123-42-2) Partition coefficient n-octanol/water 1.03 Methanol (67-56-1) Partition coefficient n-octanol/water 0.77 2-Pentanone, 4-methyl- (108-10-1) Partition coefficient n-octanol/water 1.19 Ethyl alcohol (64-17-5) Partition coefficient n-octanol/water -0.32 I2.5. Other adverse effects Dzone : Not classified. I3.1. Disposal methods Product/Packaging disposal recommendations : This material must be disposed of in accordance with all local, state, provincial, and federal regulations. The generation of waste should be avoided or minimized wherever possible.	Partition coefficient n-octanol/water	-0.32
Partition coefficient n-octanol/water 0.05 (at 25 °C) Diacetone alcohol (123-42-2) Partition coefficient n-octanol/water 1.03 Methanol (67-56-1) Partition coefficient n-octanol/water -0.77 2-Pentanone, 4-methyl- (108-10-1) Partition coefficient n-octanol/water 1.19 Ethyl alcohol (64-17-5) Partition coefficient n-octanol/water -0.32 12.5. Other adverse effects Dzone : Not classified. I3.1. Disposal methods : This material must be disposed of in accordance with all local, state, provincial, and federal regulations. The generation of waste should be avoided or minimized wherever possible.	12.4. Mobility in soil	
Diacetone alcohol (123-42-2) Partition coefficient n-octanol/water 1.03 Methanol (67-56-1) Partition coefficient n-octanol/water -0.77 2-Pentanone, 4-methyl- (108-10-1) Partition coefficient n-octanol/water 1.19 Ethyl alcohol (64-17-5) Partition coefficient n-octanol/water -0.32 12.5. Other adverse effects Dzone : Not classified. I3.1. Disposal methods troduct/Packaging disposal recommendations : This material must be disposed of in accordance with all local, state, provincial, and federal regulations. The generation of waste should be avoided or minimized wherever possible.	lsopropyl alcohol (67-63-0)	
Partition coefficient n-octanol/water 1.03 Methanol (67-56-1) -0.77 Partition coefficient n-octanol/water -0.77 2-Pentanone, 4-methyl- (108-10-1) -0.77 Partition coefficient n-octanol/water 1.19 Ethyl alcohol (64-17-5) -0.32 Partition coefficient n-octanol/water -0.32 12.5. Other adverse effects -0.32 Jzone : Not classified. IS.1. Disposal methods : This material must be disposed of in accordance with all local, state, provincial, and federal regulations. The generation of waste should be avoided or minimized wherever possible.	Partition coefficient n-octanol/water	0.05 (at 25 °C)
Methanol (67-56-1) Partition coefficient n-octanol/water -0.77 2-Pentanone, 4-methyl- (108-10-1) Partition coefficient n-octanol/water 1.19 Ethyl alcohol (64-17-5) Partition coefficient n-octanol/water -0.32 12.5. Other adverse effects Dzone : Not classified. I3.1. Disposal methods : This material must be disposed of in accordance with all local, state, provincial, and federal regulations. The generation of waste should be avoided or minimized wherever possible.	Diacetone alcohol (123-42-2)	
Partition coefficient n-octanol/water -0.77 2-Pentanone, 4-methyl- (108-10-1) Partition coefficient n-octanol/water 1.19 Ethyl alcohol (64-17-5) Partition coefficient n-octanol/water -0.32 12.5. Other adverse effects Dzone : Not classified. I3.1. Disposal methods Product/Packaging disposal recommendations : This material must be disposed of in accordance with all local, state, provincial, and federal regulations. The generation of waste should be avoided or minimized wherever possible.	Partition coefficient n-octanol/water	1.03
2-Pentanone, 4-methyl- (108-10-1) Partition coefficient n-octanol/water 1.19 Ethyl alcohol (64-17-5) Partition coefficient n-octanol/water -0.32 I2.5. Other adverse effects Dzone : Not classified. I3.1. Disposal methods Product/Packaging disposal recommendations : This material must be disposed of in accordance with all local, state, provincial, and federal regulations. The generation of waste should be avoided or minimized wherever possible.	Methanol (67-56-1)	
Partition coefficient n-octanol/water 1.19 Ethyl alcohol (64-17-5) -0.32 Partition coefficient n-octanol/water -0.32 12.5. Other adverse effects -0.32 Dzone : Not classified. I3.1. Disposal methods - Product/Packaging disposal recommendations : This material must be disposed of in accordance with all local, state, provincial, and federal regulations. The generation of waste should be avoided or minimized wherever possible.	Partition coefficient n-octanol/water	-0.77
Ethyl alcohol (64-17-5) Partition coefficient n-octanol/water -0.32 12.5. Other adverse effects Dzone : Not classified. 13.1. Disposal methods Product/Packaging disposal recommendations : This material must be disposed of in accordance with all local, state, provincial, and federal regulations. The generation of waste should be avoided or minimized wherever possible.	2-Pentanone, 4-methyl- (108-10-1)	
Partition coefficient n-octanol/water -0.32 12.5. Other adverse effects Dzone : Not classified. 13.1. Disposal methods Product/Packaging disposal recommendations : This material must be disposed of in accordance with all local, state, provincial, and federal regulations. The generation of waste should be avoided or minimized wherever possible.	Partition coefficient n-octanol/water	1.19
12.5. Other adverse effects Dzone : Not classified. 13.1. Disposal methods Product/Packaging disposal recommendations : This material must be disposed of in accordance with all local, state, provincial, and federal regulations. The generation of waste should be avoided or minimized wherever possible.	Ethyl alcohol (64-17-5)	
 Dzone : Not classified. I3.1. Disposal methods Product/Packaging disposal recommendations : This material must be disposed of in accordance with all local, state, provincial, and federal regulations. The generation of waste should be avoided or minimized wherever possible. 	Partition coefficient n-octanol/water	-0.32
13.1. Disposal methods Product/Packaging disposal recommendations : This material must be disposed of in accordance with all local, state, provincial, and federal regulations. The generation of waste should be avoided or minimized wherever possible.	12.5. Other adverse effects	
Product/Packaging disposal recommendations : This material must be disposed of in accordance with all local, state, provincial, and federal regulations. The generation of waste should be avoided or minimized wherever possible.	Dzone	: Not classified.
Product/Packaging disposal recommendations : This material must be disposed of in accordance with all local, state, provincial, and federal regulations. The generation of waste should be avoided or minimized wherever possible.		
regulations. The generation of waste should be avoided or minimized wherever possible.	I3.1. Disposal methods	
Additional information : Handle empty containers with care because residual vapours are flammable.		regulations. The generation of waste should be avoided or minimized wherever possible.
	Additional Information	: Handle empty containers with care because residual vapours are flammable.

Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

14.1. UN number	
UN-No. (TDG)	: UN1170
14.2. UN proper shipping name	
Proper Shipping Name (TDG)	: ETHANOL SOLUTION (more than 24 per cent ethanol, by volume)
14.3. Transport hazard class(es)	
TDG Transport hazard class(es) (TDG) Hazard labels (TDG)	$\begin{array}{c} 3 \\ 3 \\ \end{array}$
14.4. Packing group	
Packing group (TDG)	: 11
14.5. Environmental hazards	
Other information	: No supplementary information available.
14.6. Special precautions for user	
Special transport precautions	: Do not handle until all safety precautions have been read and understood.
TDG UN-No. (TDG) TDG Special Provisions Explosive Limit and Limited Quantity Index Excepted quantities (TDG) Passenger Carrying Road Vehicle or Passenger Carrying Railway Vehicle Index	 UN1170 150 - An approved ERAP is required for the dangerous goods referred to in paragraph 7.2(1)(f) of Part 7 (Emergency Response Assistance Plan). SOR-2019-101 1 L E2 5 L

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

15.1. National regulations

All components of this product are listed, or excluded from listing, on the Canadian DSL (Domestic Substances List) and NDSL (Non-Domestic Substances List) inventories.

15.2. International regulations

No additional information available

Issue date	:	09/19/2016
Revision date	:	12/03/2021

Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

Indication of changes:	
SDS update.	

Other information Prepared by None.

: Nexreg Compliance Inc. www.Nexreg.com



Safety Data Sheet (SDS), Canada - Nexreg 2021

Disclaimer: We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for the user's own particular use.