

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Issue date: 09/19/2022

SECTI	SECTION 1: Identification			
1.1.	Identification			
Produc	t form : Mixtu	re		
Produc	t name : WIEC	GERT'S IRON HEMATOXYLIN SOL A		
Produc				
1.2.	Recommended use and restrictions on use			
		as laboratory reagent, Manufacture of substances		
		as laboratory reagent, manufacture of substances		
1.3.	Supplier			
Warrin T +1 2				
1.4.	Emergency telephone number			
Emerg	ency number : 24-ho	pur emergency phone number ChemTel 1-800-255-3924		
2.1.	SECTION 2: Hazard(s) identification 2.1. Classification of the substance or mixture GHS US classification			
Flamm	able liquids Category 1	Extremely flammable liquid and vapor		
	oxicity (oral) Category 4	Harmful if swallowed		
Skin co	prrosion/irritation Category 2	Causes skin irritation		
	s eye damage/eye irritation Category 2	Causes serious eye irritation		
	cell mutagenicity Category 2	Suspected of causing genetic defects		
	ogenicity Category 1A	May cause cancer		
	luctive toxicity Category 2	Suspected of damaging fertility or the unborn child		
Specin 1	c target organ toxicity (single exposure) Category	Causes damage to organs		
3, Naro		May cause drowsiness or dizziness		
Catego		May cause damage to organs through prolonged or repeated exposure		
Catego	5	Harmful to aquatic life		
Hazaro Catego	lous to the aquatic environment – Chronic Hazard ry 3	Harmful to aquatic life with long lasting effects		
2.2.	GHS Label elements, including precautionary	statements		

GHS US labeling

Hazard pictograms (GHS US)

Signal word (GHS US) Hazard statements (GHS US)

:

- : Danger Extremely flammable liquid and vapor Harmful if swallowed Causes skin irritation Causes serious eye irritation May cause drowsiness or dizziness Suspected of causing genetic defects May cause cancer Suspected of damaging fertility or the unborn child Causes damage to organs May cause damage to organs through prolonged or repeated exposure
- Harmful to aquatic life
- Harmful to aquatic life with long lasting effects

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Precautionary statements (GHS US)	 Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking Keep container tightly closed. Ground/Bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment.
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2.3. Other hazards which do not result in classification

No additional information available

Unknown acute toxicity (GHS US) 2.4.

Not applicable

SECTION 3: Composition/Information on ingredients

Substances 3.1.

Not applicable

3.2. **Mixtures**

Name	Product identifier	%	GHS US classification
Acetaldehyde	(CAS-No.) 75-07-0	0 – 5	Flam. Liq. 1, H224 Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Muta. 2, H341 Carc. 1A, H350 STOT SE 3, H335 Aquatic Acute 2, H401
Ethyl acetate	(CAS-No.) 141-78-6	0 – 5	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336
Acetone	(CAS-No.) 67-64-1	0 – 5	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336
Cyclohexane	(CAS-No.) 110-82-7	0 – 5	Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 3, H412
Hematoxylin	(CAS-No.) 517-28-2	0 – 5	Eye Irrit. 2A, H319 Aquatic Acute 3, H402
Methyl alcohol	(CAS-No.) 67-56-1	0 – 5	Flam. Liq. 2, H225 Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation), H331 Acute Tox. 3 (Inhalation:vapour), H331 STOT SE 1, H370
4-methylpentan-2-one, isobutyl methyl ketone	(CAS-No.) 108-10-1	0 – 5	Flam. Liq. 2, H225 Acute Tox. 4 (Inhalation), H332 Eye Irrit. 2, H319 Carc. 2, H351 STOT SE 3, H335
n-hexane	(CAS-No.) 110-54-3	0 – 5	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Repr. 2, H361 STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304 Aquatic Acute 2, H401 Aquatic Chronic 2, H411

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures	
4.1. Description of first aid measures	
First-aid measures general	: IF exposed or concerned: Get medical advice/attention. Call a poison center/doctor/physician if you feel unwell.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. If skin irritation occurs: Get medical advice/attention.
11/14/2023	EN (English US) 2/13

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

according to rederar register / vol. //, No. 30 / Monday, r	viai cir 20, 2012 / Rules and Regulations
First-aid measures after eye contact	: 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	: Rinse mouth. Call a poison center/doctor/physician if you feel unwell.
4.2. Most important symptoms and effect	is (acute and delayed)
Symptoms/effects	: May cause drowsiness or dizziness.
Symptoms/effects after skin contact	: Irritation.
Symptoms/effects after eye contact	: Eye irritation.
4.3. Immediate medical attention and spe	cial treatment, if necessary
Treat symptomatically.	
SECTION 5: Fire-fighting measures	
5.1. Suitable (and unsuitable) extinguishi	ng media
Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.
5.2. Specific hazards arising from the che	emical
Fire hazard	: Extremely flammable liquid and vapor.
Hazardous decomposition products in case of	: Toxic fumes may be released.
fire	
5.3. Special protective equipment and pro	ecautions for fire-fighters
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
SECTION 6: Accidental release meas	ures
6.1. Personal precautions, protective equ	ipment and emergency procedures
6.1.1. For non-emergency personnel	
Emergency procedures	: No open flames, no sparks, and no smoking. Only qualified personnel equipped with suitable
5 71	protective equipment may intervene. Do not breathe dust/fume/gas/mist/vapors/spray.
6.1.2. For emergency responders	
Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information
	refer to section 8: "Exposure controls/personal protection".
6.2. Environmental precautions	
Avoid release to the environment. Notify authoritie	es if product enters sewers or public waters.
6.3. Methods and material for containment	nt and cleaning up
For containment	: Collect spillage.
Methods for cleaning up	: Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.
Other information	: Dispose of materials or solid residues at an authorized site.
6.4. Reference to other sections	
For further information refer to section 13.	
SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Precautions for safe handling	: Ensure good ventilation of the work station. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapors may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Take all necessary technical measures to avoid or minimize the release of the product on the workplace. Limit quantities of product at the minimum necessary for handling and limit the number of exposed workers. Provide local exhaust or general room ventilation. Floors, walls and other surfaces in the hazard area must be cleaned regularly. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with skin and eyes.
Hygiono mogsuros	· Soparate working clothes from town clothes I aunder soparately. Wash contaminated clothing

Hygiene measures : Separate working clothes from town clothes. Launder separately. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

7.2.	Conditions for safe storage, including	any incompatibilities
Techn	ical measures	: Ground/bond container and receiving equipment.
Storag	e conditions	Store at room temp. Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters
WIEGERT'S IRON HEMATOXYLIN SOL A

WIEGERT'S IRON HEMATOXYLIN SOL A	
No additional information available	
Acetaldehyde (75-07-0)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Acetaldehyde
ACGIH Ceiling (ppm)	25 ppm
Remark (ACGIH)	TLV® Basis: Eye & URT irr. Notations: A2 (Suspected Human Carcinogen)
ACGIH chemical category	Suspected Human Carcinogen
Regulatory reference	ACGIH 2020
USA - OSHA - Occupational Exposure Limits	
Local name	Acetaldehyde
OSHA PEL (TWA) (mg/m ³)	360 mg/m ³
OSHA PEL (TWA) (ppm)	200 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
USA - IDLH - Occupational Exposure Limits	
US IDLH (ppm)	2000 ppm
Ethyl acetate (141-78-6)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH TWA (ppm)	400 ppm
USA - OSHA - Occupational Exposure Limits	
OSHA PEL (TWA) (mg/m ³)	1400 mg/m ³
OSHA PEL (TWA) (ppm)	400 ppm
USA - IDLH - Occupational Exposure Limits	
US IDLH (ppm)	2000 ppm (10% LEL)
USA - NIOSH - Occupational Exposure Limits	
NIOSH REL (TWA) (mg/m ³)	1400 mg/m ³
NIOSH REL TWA [ppm]	400 ppm
Acetone (67-64-1)	· · · ·
USA - ACGIH - Occupational Exposure Limits	
Local name	Acetone
ACGIH TWA (ppm)	250 ppm meow
ACGIH STEL (ppm)	500 ppm
Remark (ACGIH)	eye irr; CNS impair; BEI
ACGIH chemical category	Not Classifiable as a Human Carcinogen
Regulatory reference	ACGIH 2018
USA - ACGIH - Biological Exposure Indices	
Biological Exposure Indices (BEI)	25 mg/l Parameter: Acetone - Medium: urine - Sampling time: end of shift (nonspecific)
USA - OSHA - Occupational Exposure Limits	
Local name	Acetone
OSHA PEL (TWA) (mg/m ³)	2400 mg/m ³
OSHA PEL (TWA) (ppm)	1000 ppm
Regulatory reference (US-OSHA)	OSHA
USA - IDLH - Occupational Exposure Limits	
US IDLH (ppm)	≤ 2500 ppm (10% LEL)
USA - NIOSH - Occupational Exposure Limits	

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

NIOSH REL TWA [ppm]	250 ppm
Cyclohexane (110-82-7)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Cyclohexane
ACGIH TWA (ppm)	100 ppm
Remark (ACGIH)	TLV® Basis: CNS impair
Regulatory reference	ACGIH 2020
USA - OSHA - Occupational Exposure Limits	
Local name	Cyclohexane
OSHA PEL (TWA) (mg/m ³)	1050 mg/m ³
OSHA PEL (TWA) (ppm)	300 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
USA - IDLH - Occupational Exposure Limits	
US IDLH (ppm)	1300 ppm (10% LEL)
USA - NIOSH - Occupational Exposure Limits	
NIOSH REL (TWA) (mg/m ³)	1050 mg/m ³
NIOSH REL TWA [ppm]	300 ppm
Hematoxylin (517-28-2)	
No additional information available	
Methyl alcohol (67-56-1)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH TWA (ppm)	200 ppm
ACGIH STEL (ppm)	250 ppm
ACGIH chemical category	Skin - potential significant contribution to overall exposure by the cutaneous route
USA - ACGIH - Biological Exposure Indices	
Biological Exposure Indices (BEI)	15 mg/l Parameter: Methanol - Medium: urine - Sampling time: end of shift (background, nonspecific)
USA - OSHA - Occupational Exposure Limits	
OSHA PEL (TWA) (mg/m ³)	260 mg/m ³
OSHA PEL (TWA) (ppm)	200 ppm
USA - IDLH - Occupational Exposure Limits	
US IDLH (ppm)	6000 ppm
USA - NIOSH - Occupational Exposure Limits	
NIOSH REL (TWA) (mg/m ³)	260 mg/m ³
NIOSH REL TWA [ppm]	200 ppm
NIOSH REL (STEL) (mg/m ³)	325 mg/m ³
NIOSH REL STEL [ppm]	250 ppm
US-NIOSH chemical category	Detential for demond abounding
4-methylpentan-2-one, isobutyl methyl ketone	Potential for dermal absorption
USA - ACGIH - Occupational Exposure Limits	e (108-10-1)
USA - ACGIH - Occupational Exposure Limits ACGIH TWA (ppm)	e (108-10-1)
ACGIH TWA (ppm)	20 ppm
ACGIH TWA (ppm) ACGIH STEL (ppm)	20 ppm 75 ppm
ACGIH TWA (ppm) ACGIH STEL (ppm) ACGIH chemical category	20 ppm
ACGIH TWA (ppm) ACGIH STEL (ppm) ACGIH chemical category USA - ACGIH - Biological Exposure Indices	20 ppm 75 ppm Confirmed Animal Carcinogen with Unknown Relevance to Humans
ACGIH TWA (ppm) ACGIH STEL (ppm) ACGIH chemical category USA - ACGIH - Biological Exposure Indices Biological Exposure Indices (BEI)	20 ppm 75 ppm
ACGIH TWA (ppm) ACGIH STEL (ppm) ACGIH chemical category USA - ACGIH - Biological Exposure Indices Biological Exposure Indices (BEI) USA - OSHA - Occupational Exposure Limits	20 ppm 75 ppm Confirmed Animal Carcinogen with Unknown Relevance to Humans 1 mg/l Parameter: MIBK - Medium: urine - Sampling time: end of shift
ACGIH TWA (ppm) ACGIH STEL (ppm) ACGIH chemical category USA - ACGIH - Biological Exposure Indices Biological Exposure Indices (BEI) USA - OSHA - Occupational Exposure Limits OSHA PEL (TWA) (mg/m ³)	20 ppm 75 ppm Confirmed Animal Carcinogen with Unknown Relevance to Humans 1 mg/l Parameter: MIBK - Medium: urine - Sampling time: end of shift 410 mg/m ³
ACGIH TWA (ppm) ACGIH STEL (ppm) ACGIH chemical category USA - ACGIH - Biological Exposure Indices Biological Exposure Indices (BEI) USA - OSHA - Occupational Exposure Limits OSHA PEL (TWA) (mg/m ³) OSHA PEL (TWA) (ppm)	20 ppm 75 ppm Confirmed Animal Carcinogen with Unknown Relevance to Humans 1 mg/l Parameter: MIBK - Medium: urine - Sampling time: end of shift
ACGIH TWA (ppm) ACGIH STEL (ppm) ACGIH chemical category USA - ACGIH - Biological Exposure Indices Biological Exposure Indices (BEI) USA - OSHA - Occupational Exposure Limits OSHA PEL (TWA) (mg/m ³) OSHA PEL (TWA) (ppm) USA - IDLH - Occupational Exposure Limits	20 ppm 75 ppm Confirmed Animal Carcinogen with Unknown Relevance to Humans 1 mg/l Parameter: MIBK - Medium: urine - Sampling time: end of shift 410 mg/m ³ 100 ppm
ACGIH TWA (ppm) ACGIH STEL (ppm) ACGIH chemical category USA - ACGIH - Biological Exposure Indices Biological Exposure Indices (BEI) USA - OSHA - Occupational Exposure Limits OSHA PEL (TWA) (mg/m ³) OSHA PEL (TWA) (ppm) USA - IDLH - Occupational Exposure Limits US IDLH (ppm)	20 ppm 75 ppm Confirmed Animal Carcinogen with Unknown Relevance to Humans 1 mg/l Parameter: MIBK - Medium: urine - Sampling time: end of shift 410 mg/m ³ 100 ppm
ACGIH TWA (ppm) ACGIH STEL (ppm) ACGIH chemical category USA - ACGIH - Biological Exposure Indices Biological Exposure Indices (BEI) USA - OSHA - Occupational Exposure Limits OSHA PEL (TWA) (mg/m ³) OSHA PEL (TWA) (ppm) USA - IDLH - Occupational Exposure Limits US IDLH (ppm) USA - NIOSH - Occupational Exposure Limits	20 ppm 75 ppm Confirmed Animal Carcinogen with Unknown Relevance to Humans 1 mg/l Parameter: MIBK - Medium: urine - Sampling time: end of shift 410 mg/m ³ 100 ppm
ACGIH TWA (ppm) ACGIH STEL (ppm) ACGIH STEL (ppm) ACGIH chemical category USA - ACGIH - Biological Exposure Indices Biological Exposure Indices (BEI) USA - OSHA - Occupational Exposure Limits OSHA PEL (TWA) (mg/m ³) OSHA PEL (TWA) (ppm) USA - IDLH - Occupational Exposure Limits US IDLH (ppm) USA - NIOSH - Occupational Exposure Limits NIOSH REL (TWA) (mg/m ³)	20 ppm 75 ppm Confirmed Animal Carcinogen with Unknown Relevance to Humans 1 mg/l Parameter: MIBK - Medium: urine - Sampling time: end of shift 410 mg/m ³ 100 ppm 500 ppm
ACGIH TWA (ppm) ACGIH STEL (ppm) ACGIH chemical category USA - ACGIH - Biological Exposure Indices Biological Exposure Indices (BEI) USA - OSHA - Occupational Exposure Limits OSHA PEL (TWA) (mg/m ³) OSHA PEL (TWA) (ppm) USA - IDLH - Occupational Exposure Limits US IDLH (ppm) USA - NIOSH - Occupational Exposure Limits	20 ppm 75 ppm Confirmed Animal Carcinogen with Unknown Relevance to Humans 1 mg/l Parameter: MIBK - Medium: urine - Sampling time: end of shift 410 mg/m ³ 100 ppm

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

NIOSH REL STEL [ppm]	75 ppm	
n-hexane (110-54-3)		
USA - ACGIH - Occupational Exposure Limits		
Local name	n-Hexane	
ACGIH TWA (ppm)	50 ppm	
Remark (ACGIH)	TLV® Basis: CNS impair; peripheral neuropathy; eye irr. Notations: Skin; BEI	
ACGIH chemical category	Skin - potential significant contribution to overall exposure by the cutaneous route	
Regulatory reference	ACGIH 2020	
USA - OSHA - Occupational Exposure Limits		
Local name	n-Hexane	
OSHA PEL (TWA) (mg/m ³)	1800 mg/m ³	
OSHA PEL (TWA) (ppm)	500 ppm	
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1	
USA - IDLH - Occupational Exposure Limits		
US IDLH (ppm)	1100 ppm (10% LEL)	
USA - NIOSH - Occupational Exposure Limits		
NIOSH REL (TWA) (mg/m ³)	180 mg/m³	
NIOSH REL TWA [ppm]	50 ppm	
NIOSH REL I WA [ppm]	50 ppm	

8.2. Appropriate engineering controls

Appropriate engineering controls Environmental exposure controls Ensure good ventilation of the work station.Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Protective gloves

Eye protection:

Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

[In case of inadequate ventilation] wear respiratory protection.

Personal protective equipment symbol(s):



SECTION 9: Physical and chemical properties			
9.1. Information on basic physical and che	mical properties		
Physical state	: Liquid		
Color	: Mixture contains one or more component(s) which have the following colour(s): Colorless clear		
Odor	 There may be no odour warning properties, odour is subjective and inadequate to warn of overexposure. Mixture contains one or more component(s) which have the following odour: Fruity Sweet mint-like liquid with gasoline-like alcohol-like sharp petroleum 	i	
Odor threshold	: No data available		
рН	: No data available		
Melting point	: Not applicable		
Freezing point	: No data available		
11/14/2023	EN (English US)	6/13	

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Boiling point	: No data available
Flash point	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: No data available
Relative vapor density at 20°C	: No data available
Relative density	: No data available
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity			
10.1. Reactivity			
Extremely flammable liquid and vapor.	Extremely flammable liquid and vapor.		
10.2. Chemical stability			
Stable under normal conditions.			
10.3. Possibility of hazardous reactions			
No dangerous reactions known under normal condition	ions of use.		
10.4. Conditions to avoid			
Avoid contact with hot surfaces. Heat. No flames, no	a sparks. Eliminate all sources of ignition		
10.5. Incompatible materials			
No additional information available			
10.6. Hazardous decomposition products			
Under normal conditions of storage and use, hazard	lous decomposition products should not be produced.		
SECTION 11: Toxicological information	1		
11.1. Information on toxicological effects			
Acute toxicity (oral)	: Harmful if swallowed.		
Acute toxicity (dermal)	Acute toxicity (dermal) : Not classified		
Acute toxicity (inhalation)	: Not classified		
ATE US (oral)	1667.233 mg/kg body weight		
Acetaldehyde (75-07-0)			
LD50 oral rat	660 mg/kg		
LC50 Inhalation - Rat [ppm]	13000 ppm/4h		
Ethyl acetate (141-78-6)			
LD50 oral rat	5620 mg/kg		
LD50 dermal rabbit	> 18000 mg/kg		
LC50 Inhalation - Rat [ppm]	4000 ppm/4h		
Acetone (67-64-1)	Acetone (67-64-1)		
LD50 oral rat	5800 mg/kg		
LD50 dermal rabbit	> 15700 mg/kg		
LC50 Inhalation - Rat	50100 mg/l (Exposure time: 8 h)		

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Cyclohexane (110-82-7)		
LD50 oral rat	12705 mg/kg	
LD50 dermal rabbit	> 2000 mg/kg	
LC50 Inhalation - Rat [ppm]	> 9500 ppm/4h	
Methyl alcohol (67-56-1)		
LD50 oral rat	6200 mg/kg	
LC50 Inhalation - Rat [ppm]	22500 ppm (Exposure time: 8 h)	
4-methylpentan-2-one, isobutyl methyl ketone (108-10-1)		
LD50 oral rat	2080 mg/kg	
LD50 dermal rabbit	3000 mg/kg	
LC50 Inhalation - Rat	8.2 mg/l/4h	
n-hexane (110-54-3)		
LD50 oral rat	25 g/kg	
LD50 dermal rabbit	3000 mg/kg	
LC50 Inhalation - Rat [ppm]	48000 ppm/4h	
Skin corrosion/irritation : Causes skin irritation.		
Serious eye damage/irritation : Causes serious eye irritation.		
Respiratory or skin sensitization : Not classified		
Germ cell mutagenicity	: Suspected of causing genetic defects.	
Carcinogenicity	: May cause cancer.	
Acetaldehyde (75-07-0)		
IARC group	2B - Possibly carcinogenic to humans, 1 - Carcinogenic to humans	
National Toxicity Program (NTP) Status	Reasonably anticipated to be Human Carcinogen	
In OSHA Hazard Communication Carcinogen list	Yes	

4-methylpentan-2-one, isobutyl methyl ketone (108-10-1)	
IARC group	2B - Possibly carcinogenic to humans
National Toxicity Program (NTP) Status	Evidence of Carcinogenicity
In OSHA Hazard Communication Carcinogen list	Yes
Reproductive toxicity	: Suspected of damaging fertility or the unborn child.

STOT-single exposure	: Causes damage to organs. May cause drowsiness or dizziness.	
Acetaldehyde (75-07-0)		
STOT-single exposure	May cause respiratory irritation.	
Ethyl acetate (141-78-6)		
STOT-single exposure	May cause drowsiness or dizziness.	
Acetone (67-64-1)		
STOT-single exposure	May cause drowsiness or dizziness.	
Cyclohexane (110-82-7)		
STOT-single exposure	May cause drowsiness or dizziness.	
Methyl alcohol (67-56-1)		
STOT-single exposure	Causes damage to organs.	
4-methylpentan-2-one, isobutyl methyl ketone (108-10-1)		
STOT-single exposure	May cause respiratory irritation.	
n-hexane (110-54-3)		
STOT-single exposure	ngle exposure May cause drowsiness or dizziness.	

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

STOT-repeated exposure

: May cause damage to organs through prolonged or repeated exposure.

n-hexane (110-54-3)		
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.	
Aspiration hazard	: Not classified	
Viscosity, kinematic	: No data available	
Symptoms/effects	: May cause drowsiness or dizziness.	
Symptoms/effects after skin contact	: Irritation.	
Symptoms/effects after eye contact	: Eye irritation.	

SECTION 12: Ecological information 12.1. **Toxicity** : Harmful to aquatic life. Harmful to aquatic life with long lasting effects. Ecology - general Acetaldehyde (75-07-0) LC50 fish 1 28.0 - 34.0 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through]) EC50 Daphnia 1 3.64 - 6.15 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static]) LC50 fish 2 53 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static]) EC50 Daphnia 2 48.3 mg/l (Exposure time: 48 h - Species: Daphnia magna) Ethyl acetate (141-78-6) 220 - 250 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through]) LC50 fish 1 EC50 Daphnia 1 560 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static]) LC50 fish 2 484 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through]) Acetone (67-64-1) EC50 Daphnia 1 10294 - 17704 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static]) LC50 fish 2 6210 - 8120 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static]) Cyclohexane (110-82-7) LC50 fish 1 3.96 - 5.18 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through]) EC50 Daphnia 1 0.9 mg/l LC50 fish 2 23.03 - 42.07 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static]) NOEC chronic algae 0.94 mg/l Methyl alcohol (67-56-1) LC50 fish 1 28200 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through]) LC50 fish 2 > 100 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static]) 4-methylpentan-2-one, isobutyl methyl ketone (108-10-1) LC50 fish 1 496 - 514 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through]) EC50 Daphnia 1 170 mg/l (Exposure time: 48 h - Species: Daphnia magna) n-hexane (110-54-3) 2.1 - 2.98 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through]) LC50 fish 1 EC50 Daphnia 1 3.88 mg/l 12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

Acetaldehyde (75-07-0)	
Partition coefficient n-octanol/water (Log Pow)	0.5
Ethyl acetate (141-78-6)	
BCF fish 1	30
Partition coefficient n-octanol/water (Log Pow)	0.6

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

D.69		
0.24		
Cyclohexane (110-82-7)		
3.44		
Methyl alcohol (67-56-1)		
< 10		
0.77		
4-methylpentan-2-one, isobutyl methyl ketone (108-10-1)		
1.19		
3. < .0		

No additional information available

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations		
13.1. Disposal methods		
Waste treatment methods :	Dispose of contents/container in accordance with licensed collector's sorting instructions.	
Additional information :	Flammable vapors may accumulate in the container.	
SECTION 14: Transport information		
Department of Transportation (DOT)		
In accordance with DOT		
Not applicable		
Transportation of Dangerous Goods		
Not applicable		
Transport by sea		
Not applicable		
Air transport		
Not applicable		
SECTION 15: Regulatory information		
15.1. US Federal regulations		
Acetaldehyde (75-07-0)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313 Listed on EPA Hazardous Air Pollutant (HAPS)		
CERCLA RQ	1000 lb	

	CERCLA RQ	1000 lb
Ethyl acetate (141-78-6) Listed on the United States TSCA (Toxic Substances Control Act) inventory		
		ces Control Act) inventory
	CERCLA RQ	5000 lb

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Acetone (67-64-1)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory Not subject to reporting requirements of the United States SARA Section 313		
CERCLA RQ	5000 lb	
Cyclohexane (110-82-7)		
Listed on the United States TSCA (Toxic Substan Subject to reporting requirements of United States		
CERCLA RQ	1000 lb	
Hematoxylin (517-28-2)		
Listed on the United States TSCA (Toxic Substan	ces Control Act) inventory	
Methyl alcohol (67-56-1)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313 Listed on EPA Hazardous Air Pollutant (HAPS)		
CERCLA RQ	5000 lb	
4-methylpentan-2-one, isobutyl methyl ketone (108-10-1)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313 Listed on EPA Hazardous Air Pollutant (HAPS)		
CERCLA RQ	5000 lb	
n-hexane (110-54-3)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313 Listed on EPA Hazardous Air Pollutant (HAPS)		
CERCLA RQ	5000 lb	

15.2. International regulations

CANADA

Acetaldehyde (75-07-0)		
Listed on the Canadian DSL (Domestic Substances List)		
Toxic Substance (CEPA – Schedule I)	Yes	
Ethyl acetate (141-78-6)		
Listed on the Canadian DSL (Domestic Substances List)		
Acetone (67-64-1)		
Listed on the Canadian DSL (Domestic Substances List)		
Cyclohexane (110-82-7)		
Listed on the Canadian DSL (Domestic Substances List)		
Hematoxylin (517-28-2)		
Listed on the Canadian DSL (Domestic Substances List)		
Methyl alcohol (67-56-1)		
Listed on the Canadian DSL (Domestic Substances List)		
4-methylpentan-2-one, isobutyl methyl ketone (108-10-1)		
Listed on the Canadian DSL (Domestic Substances List)		
n-hexane (110-54-3)		
Listed on the Canadian DSL (Domestic Substances List)		

EU-Regulations

Ethyl acetate (141-78-6)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Hematoxylin (517-28-2)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Methyl alcohol (67-56-1)	
Listed on the EEC inventory EINECS (Europe	ean Inventory of Existing Commercial Chemical Substances)
4-methylpentan-2-one, isobutyl methyl ke	tone (108-10-1)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances	
onal regulations	
Acetaldehyde (75-07-0)	
Listed as carcinogen on NTP (National Toxic	ology Program)
Ethyl acetate (141-78-6)	
Listed in the disetion of Assets lists had set of a O	

Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)

- Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
- Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
- Listed on the Japanese ISHL (Industrial Safety and Health Law) Listed on KECL/KECI (Korean Existing Chemicals Inventory)
- Listed on NZIOC (New Zealand Inventory of Chemicals)
- Listed on NZICC (New Zealand Inventory of Chemicals)
- Japanese Poisonous and Deleterious Substances Control Law
- Listed on INSQ (Mexican National Inventory of Chemical Substances)
- Listed on CICR (Turkish Inventory and Control of Chemicals)
- Listed on the TCSI (Taiwan Chemical Substance Inventory)

Hematoxylin (517-28-2)

Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)

- Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
- Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
- Listed on the Japanese ISHL (Industrial Safety and Health Law)
- Listed on KECL/KECI (Korean Existing Chemicals Inventory)
- Listed on NZIoC (New Zealand Inventory of Chemicals)
- Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
- Listed on the TCSI (Taiwan Chemical Substance Inventory)

Methyl alcohol (67-56-1)

- Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)
- Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
- Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
- Listed on the Japanese ISHL (Industrial Safety and Health Law)
- Listed on KECL/KECI (Korean Existing Chemicals Inventory)
- Listed on NZIoC (New Zealand Inventory of Chemicals)
- Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
- Japanese Poisonous and Deleterious Substances Control Law
- Listed on INSQ (Mexican National Inventory of Chemical Substances)
- Listed on CICR (Turkish Inventory and Control of Chemicals)
- Listed on the TCSI (Taiwan Chemical Substance Inventory)

4-methylpentan-2-one, isobutyl methyl ketone (108-10-1)

- Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)
- Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
- Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
- Listed on the Japanese ISHL (Industrial Safety and Health Law)
- Listed on KECL/KECI (Korean Existing Chemicals Inventory)
- Listed on NZIoC (New Zealand Inventory of Chemicals)
- Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
- Listed on INSQ (Mexican National Inventory of Chemical Substances)
- Listed on CICR (Turkish Inventory and Control of Chemicals)
- Listed on the TCSI (Taiwan Chemical Substance Inventory)

15.3. US State regulations

Acetaldehyde (7	75-07-0)				
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)	Maximum allowable dose level (MADL)
Yes	No	No	No	90 μg/day (inhalation)	

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

5		-	-			
Methyl alcohol	(67-56-1)					
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)	Maximum allowable dose level (MADL)	
Νο	Yes	No	No		47000 μg/day inhalation	
4-methylpentan	-2-one, isobutyl me	thyl ketone (108-10- [,]	1)			
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)	Maximum allowable dose level (MADL)	
Yes	Yes	No	No			
n-hexane (110-	54-3)					
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)	Maximum allowable dose level (MADL)	
No	No	No	Yes		28000 μg/day (oral); 20,000 μg/day (inhalation)	
Component			State or local regulations			
Acetaldehyde(75-07-0)			U.S New Jersey - Right to Know Hazardous Substance List; U.S Pennsylvani RTK (Right to Know) List			
Ethyl acetate(141-78-6)			U.S Massachusetts - Right To Know List; U.S New Jersey - Right to Know Hazardous Substance List; U.S Pennsylvania - RTK (Right to Know) - Environmental Hazard List; U.S Pennsylvania - RTK (Right to Know) List			
Acetone(67-64-1)			U.S Massachusetts - Right To Know List; U.S New Jersey - Right to Know Hazardous Substance List; U.S Pennsylvania - RTK (Right to Know) List			
Cyclohexane(110-82-7)			U.S Massachusetts - Right To Know List; U.S New Jersey - Right to Know Hazardous Substance List; U.S Pennsylvania - RTK (Right to Know) List			
Methyl alcohol(67-56-1)			U.S Massachusetts - Right To Know List; U.S New Jersey - Right to Know Hazardous Substance List; U.S Pennsylvania - RTK (Right to Know) - Environmental Hazard List; U.S Pennsylvania - RTK (Right to Know) List			
4-methylpentan-2-one, isobutyl methyl ketone(108-10-1)			U.S Massachusetts - Right To Know List; U.S New Jersey - Right to Know Hazardous Substance List; U.S Pennsylvania - RTK (Right to Know) - Environmental Hazard List; U.S Pennsylvania - RTK (Right to Know) List			
n-hexane(110-54	4.0)		LLC Massachusette Di	ght To Know List; U.S New	Jaraay Dight to Know	

SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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