Effective Date: 03/09/2016

Supercedes: 09/10/2015

OSHA Hazard Communication Standard 29 CFR 1900.1200 Prepared to GHS Rev. 4



SAFETY DATA SHEET

SECTION 1- CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Name: SUR-895 Urethane Reducer

Product Use: Paint /Coating Solvent/Diluent

Use Restrictions: For Industrial and Professional Use Only

Manufacturer: Southeastern Chemical Industries Group LLC 660 Oak Place Port Orange, FL 32127 386-760-9332

Transportation Emergency: 800-535-5053 (INFOTRAC)

SECTION 2- HAZARDS IDENTIFICATION

1) GHS Classification of the substance or mixture:

Acute toxicity, Inhalation- Category 3 Acute toxicity, Dermal- Category 3 Acute toxicity, Oral- Category 3 Acute toxicity, Eye- Category 2A Flammable Liquids- Category 2 Specific target organ toxicity- single exposure- Category 3 (Central Nervous System, eyes, Respiratory Tract Irritation) Aspiration Hazard – Category 1 Reproductive toxicity – Category 2 Hazardous to the aquatic environment, acute & long term hazard – Category 2

2) Label Elements:



Signal Word: Danger

Hazard Statements:

H225- Highly flammable liquid and vapor H301+H311+H331- Toxic if swallowed, in contact with skin or if inhaled H315+320- Causes skin irritation and eye irritation H370- Causes damage to organs

Precautionary Statements:

P102- Keep out of reach of childrenP210- Keep away from heat/sparks/open flameP233+P234- Keep only in original container and keep container tightly closed

P241+P242+P243- Use explosion proof electrical/ventilating/lighting equipment. Use only non sparking tools. Take precautionary measures against static discharge.

P260- Do not breathe fume/mist/vapors/spray

P262- Do not get in eyes, on skin, or on clothing

P264- Wash skin thoroughly after handling

P280- Wear solvent resistant protective gloves and splash proof eyewear

P307+P311- If exposed: call POISON CENTER or doctor/physician

Response Statements:

P303+P353+P361+P363- IF ON SKIN (or hair): Rinse skin with water/shower. Take off immediately all contaminated clothing. Wash contaminated clothing before reuse.

P305+P351+P338- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present, and easy to do so. Continue Rinsing.

P304+P340+ IF INHALED: Remove person to fresh air and keep comfortable for breathing. P301+P310- IF SWALLOWED: Immediately call POISON CENTER or doctor/physician.

Storage and Disposal Statements:

P233+P235+P403- Keep container tightly closed, keep cool and store in a well-ventilated place. P405- Store locked up.

P501- Dispose of contents/container in accordance with local/regional/national regulation.

Other Hazards:

OSHA HCS 2012- Under United States Regulations (29 CFR 1910.1200 - Hazard Communication Standard), this product is considered hazardous.

HMIS Classification:

Health Hazard- 2 Chronic Health Hazard- 0 Flammability- 3 Physical Hazards- 0 **NFPA Classification** Health Hazard - 2 Flammability - 3

Reactivity - 0

SECTION 3- COMPOSITION/INFORMATION ON INGREDIENTS

Chemical/Common Name	<u>CAS #</u>	PERCENTAGE	HAZARDOUS
Ethylene Glycol Monobutyl			
Ether Acetate	112-07-2	5-10%	Yes
N-butyl Acetate	123-86-4	10-15%	Yes
Methyl Isobutyl Ketone	108-10-1	15-20%	Yes
Aromatic Solvent	64742-95-6	25-30%	Yes
Light Aliphatic Solvent	64742-49-0	15-20%	Yes
Propylene Glycol Methyl			
Ether Acetate	108-65-6	10-15%	Yes

SECTION 4- FIRST AID MEASURES

Inhalation: If affected, remove individual to fresh air. If breathing is difficult administer oxygen. If breathing has stopped, give artificial respiration. Keep person warm and quiet and obtain medical attention. **Skin:** Immediately flush affected area with lots of water for at least 2 minutes. Remove contaminated clothing and wash before reuse.

Eyes: Flush immediately with large quantities of running water for at least 5 minutes. Obtain medical attention.

Ingestion: Immediately rinse mouth with a lot of water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Obtain immediate medical attention.

SECTION 5-FIRE FIGHTING MEASURES

Flash Point: 40°F (T.C.C.) Auto-ignition Temperature: N/D Lower Explosive Limit: N/D Upper Explosive Limit: N/D General Hazards-Fire: Product is flammable or combustible in presence of ignition source. Suitable Extinguishing Media: Use water spray, alcohol resistant foam, dry chemical or carbon dioxide. Treat as Class B (flammable liquid) fire.

Fire Fighting Procedures: Wear self contained breathing apparatus for fire fighting if necessary. **Hazardous Combustion Products:** Normal thermal hydrocarbon decomposition byproducts i.e. carbon oxides.

SECTION 6- ACCIDENTAL RELEASE MEASURES

Personal Precautions: Wear appropriate protective equipment including respiratory protection as conditions warrant. Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Avoid breathing vapors, mist or gas. **Emergency Procedures:** As an immediate precautionary measure, isolate spill or leak area for at least 50 meters (150 feet) in all directions. Keep unauthorized personnel away. Stay upwind. Ventilate closed spaces before entering.

Environmental precautions: Avoid run off to waterways and sewers.

Methods and material for containment and cleaning up: Stop leak if you can do it without risk. Absorb or cover with dry earth, sand or other non-combustible material and transfer to appropriate waste disposal container.

SECTION 7- HANDLING AND STORAGE

Precautions for safe handling:

Avoid contact with skin and eyes by wearing protective clothing and equipment. Avoid inhalation of vapor or mist. Use only with adequate ventilation.

Conditions for safe storage:

Keep container tightly closed in a dry and well-ventilated place. Store away from acids, acidic materials and oxidizers. Do not store near heat or open flame.

SECTION 8- EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters:

Component	CAS #	ACGIH Exposure Limits	OSHA Exposure Limits
Ethylene Glycol			
Monobutyl Ether Acetate	112-07-2	20 ppm	50 ppm
N-butyl Acetate	123-86-4	200 ppm	200 ppm
Methyl Isobutyl Ketone	108-10-1	20 ppm	50 ppm
Aromatic Solvent	64742-95-6	25 ppm	100 ppm
Light Aliphatic Solvent	64742-49-0	300 ppm	500 ppm
Propylene Glycol Methyl			
Ether Acetate	108-65-6	N.D.	50 ppm

Personal Protective Equipment-

Respiratory protection: In case of insufficient ventilation, wear suitable respiratory equipment. Follow the OSHA respirator regulations found in 29 CFR 1910.134. Use a NIOSH/MSHA approved respirator if exposure limits are exceeded or symptoms are experienced.

Hand protection: Wear protective gloves made from the following materials- nitrile rubber or polyethylene. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Eye Protection: Wear safety glasses with side shields.

Skin and Body Protection: Where extensive dermal exposure may be expected, either a chemical suit or chemical apron will be needed.

Hygienic Practices: Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco. Safety shower and eye wash should be available close to work areas.

SECTION 9- PHYSICAL AND CHEMICAL PROPERTIES

Products Description:CleaSolubility in Water:InsolBoiling Point:apprSpecific Gravity (WATER=1):0.84Vapor Pressure (mmHg):N/DVapor Density (AIR=1):>1Evaporation Rate (BUTYL ACETATE=1):>1Flash Point (T.C.C.):40°FpH (1% w/w in water):N/A

Clear liquid with characteristic odor Insoluble approximately 75°F 0.845 N/D >1 : >1 40°F

SECTION 10- STABILITY AND REACTIVITY DATA

Stability: Stable under recommended storage conditions.

Material to Avoid: Avoid contact with acids and strong oxidizers such as permanganate, chlorine, ect. Conditions to Avoid: Keep away from heat, sparks and open flame.

Hazardous Polymerization: Will not occur

Hazardous Decomposition Products: May form carbon dioxide, carbon monoxide and various hydrocarbons.

SECTION 11- TOXICOLOGICAL INFORMATION

Ethylene Glycol Monobutyl Ether Acetate - CAS No. 112-07-2 Acute oral toxicity: Acute toxicity estimate: 1,737 mg/kg Method: Calculation Method LD50 (rat, male and female): 1,800 mg/kg Method: OECD Test Guideline 401 Assessment: The component mixture is moderately toxic after single ingestion. Acute inhalation toxicity: Acute toxicity estimate: >30000 ppm Exposure time: 4 h Test atmosphere: gas Method: Calculation method Acute dermal toxicity: Acute toxicity estimate: 1,479 mg/kg Method: Calculation method LD50 (rabbit): 1,500 mg/kg Assessment: The component mixture is moderately toxic after single contact with skin. Skin corrosion/irritation Remarks: May cause skin irritation and/or dermatitis Species: rabbit Exposure time: 4 h Result: No skin irritation Serious eye damage/ Eye irritation: Vapors may cause irritation to the eyes, respiratory system and the skin. Species: rabbit Result: No eye irritation Test Type: Buehler Test **Respiratory/skin irritation:** Species: guinea pig Result: Did not cause sensitization on laboratory animals.

Germ cell mutagenicity

Genotoxicity in vitro:	Test type: Ames Test Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 471 Result: Negative Remarks: Information given is based on data obtained from similar substances.
Genotoxicity in vivo:	Test type: In vivo micronucleus test Test species: mouse (male) Application Route: Intraperitoneal Exposure time: 3 d Dose: 0 – 1100 mg/kg Method: OECD Test Guideline 474 Result: negative GLP: No data available

Germ cell mutagenicity: Assessment: Did not show mutagenic effects in animal experiments.

Carcinogenicity

Species: rat (male and female) Application Route: inhalation (vapor) Exposure time: 2 yrs Dose: 0, 62.5, 125, 250 ppm Frequency of Treatment: 6 h/d, 5 d/wk NOAEL: 125 LOAEL: 250 Method: OECD Test Guideline 451

Carcinogenicity: Assessment: Carcinogenicity classification not possible from current data.

Result: Limited evidence of carcinogenic effects with no relevance to humans.

Carcinogenicity: Assessment: No evidence of carcinogenicity in animal studies.

Reproductive toxicity

Effects on fertility:	Test Type: Two-generation study
	Species: mouse (male and female)
	Application Route: oral
	Dose: 0, 720, 1340, 2050, mg/kg bw
	Frequency of Treatment: 7d/wk
	General Toxicity - Parent: NOAEL: 720
	General Toxicity F1: NOAEL: 720
	Symptoms: Reduced fertility
	GLP: yes
	Remarks: Information given is based on data obtained from similar substances.
Effects on fetal	
Development:	Species: rabbit
	Application Route: vapor
	Dose: 0, 25, 50, 100, 200 ppm
	Duration of Single Treatment: 13 d
	Frequency of Treatment: 6 h/d
	General Toxicity Maternal: NOAEC: 100 ppm
	Teratogenicity: NOAEC: 200 ppm
	Developmental Toxicity: NOAEC: 100 ppm
	Method: OECD Test Guideline 414

Result: No teratogenic effects Remarks: Information given is based on data obtained from similar substances.

Species: rat Dose: 0, 30, 100, 200, 300 mg/kg bw Duration of Single Treatment: 3 d General Toxicity Maternal: NOAEC: 30 Teratogenicity: NOAEC: >200 Developmental Toxicity: NOAEC: 100 Method: OECD Test Guideline 414 Result: No teratogenic effects Remarks: Information given is based on data obtained from similar substances.

Reproductive Toxicity: Assessment: No toxicity to reproduction. Did not show teratogenic effects in animal experiments.

STOT - Single Exposure: No data available

STOT - Repeated Exposure: No data available

 Repeated dose toxicity:
 Species: rat (male and female) NOAEL: <750 Application Route: Oral Exposure time: 90 d Number of exposures: 7 d/w Dose: 750, 1500, 3000, 4500, 6000 ppm Method: OECD Test Guideline 408 GLP: yes Target Organs: Liver Remarks: Information given is based on data obtained from similar substances.

 Species:
 rabit (male and female)

NOAEL: <400 Application Route: inhalation (vapor) Exposure time: 4 wks Number of Exposures: 4 h/d, 5 d/wk Dose: 0, 400 ppm Method: OECD Test Guideline 412 Target Organs: Kidney, blood

Species: rabbit (male and female) NOAEL: >150 mg/kg Application Route: Dermal Exposure time: 90 d Number of exposures: 5 d/wk Dose: 0, 10, 50, 150 mg/kg bw

Aspiration toxicity: No aspiration toxicity classification

Further information: No data available

n-Butyl Acetate CAS No. 123-86-4

Acute oral toxicity: LD50: 10,760 mg/kg Species: rat Method: OECD Test Guideline 423 GLP: no Acute inhalation toxicity: LC50: >21 mg/l Exposure time: 4 h Species: rat (male and female) Test atmosphere: vapor Method: OECD Test Guideline 403 GLP: yes

Acute dermal toxicity: LD50: >14,112 mg/kg Species: rabbit (male and female) Method: OECD Test Guideline 402 GLP: yes

Skin corrosion/irritation: Species: rabbit Classification: Not irritating to skin Method: OECD Test Guideline 404 Result: Not irritating to skin GLP: no

Serious eye damage/eye irritation: Species: rabbit Classification: Not irritating to eyes GLP: yes

Respiratory or skin sensitization: Species: guinea pig Results: Did not cause sensitization on laboratory animals

Germ cell mutagenicity: Geno toxicity in vitro: Test type: Chromosome aberration test in vitro Test species: Chinese hamster lung fibroblasts Metabolic activation: without metabolic activation Method: OECD Test Guideline 473 Result: negative GLP: No data available

Geno toxicity in vivo: Test type: In vivo micronucleus test Test species: mouse (male and female) Application route: Oral Dose: 500, 1000, 2000 mg/kg bw Method: OECD Test Guideline 474 Result: negative GLP: yes Test substance: Information given is based on data obtained from similar substances.

Germ cell mutagenicity - Assessment: Animal testing did not show mutagenic effects.

Carcinogenicity: Carcinogenicity – Assessment: Contains no ingredient listed as a carcinogen

Reproductive toxicity: Effects on fertility: Species: rat (male and female) Application route: inhalation Dose: 0, 750, 1500, 2000 ppm Duration of Single Treatment: 6 h Frequency of treatment: 7 d/w General Toxicity: Parent: NOAEC: 750 ppm General Toxicity: F1: NOAEC: 750 ppm Fertility: NOAEC: 2,000 ppm Early embryonic development: NOAEC: 750 ppm Symptoms: Effect on reproduction capacity Method: OECD Test Guideline 416 GLP: yes

Effects on fetal development:
Species: rat (male and female)
Application route: inhalation (vapor)
Dose: 500, 1500, 3000 ppm
Duration of Single Treatment: 6 h
Frequency of Treatment: 5 d/w
Symptoms: Skeletal malformations
Result: Teratogenic effects
GLP: yes
Reproductive toxicity Assessment: No toxicity to reproduction. Animal testing did not show any effects on fetal development.

STOT – Single Exposure: No data available

STOT – Repeated Exposure: No data available

Repeated dose toxicity:

Species: rat (male and female) NOAEL: 500 Application Route: Inhalation (vapor) Exposure time: 13 w Number of exposures: 6 h/d, 5 d/w Dose: 500, 1500, 3000 ppm GLP: yes Symptoms: oral or nasal discharge

Aspiration toxicity

Further Information: Symptoms of overexposure may be headache, dizziness, tiredness, nausea, and vomiting. Concentrations substantially above the TLV value may cause narcotic effects. Solvents may degrease the skin.

Methyl Isobutyl Ketone CAS No. 108-10-1

Acute oral toxicity- LD50 (rat) 2,080 mg/kg Method: OECD Test Guideline 401 Assessment: The substance or mixture has no acute oral toxicity.

Acute inhalation toxicity- LC50 (rat): 8.2 – 16.4 mg/l Exposure time: 4 h Test atmosphere: vapor Assessment: The component/mixture is moderately toxic after short term inhalation.

Acute dermal toxicity- LD50 (rat male and female) : >1,000 mg/kg Method: OECD Test Guideline 402 GLP: yes Assessment: The substance or mixture has no acute dermal toxicity.

Skin corrosion/irritation:
Remarks: May cause skin irritation in susceptible persons.
Species: rabbit
Exposure time: 4 h
Classification: No shin irritation
Method: OECD Test Guideline 404
Result: No skin irritation
GLP: yes

Serious eye damage/eye irritation: Remarks: May cause irreversible eye damage

Species: rabbit **Result:** Irritating to eyes **Classification:** Irritating to eyes Method: OECD Test Guideline 405 GLP: yes

Respiratory or skin sensitization:

Test type: Maximization Test (GPMT) Species: guinea pig Assessment: Did not cause sensitization on laboratory animals Method: OECD Test Guideline 406 **Result:** Did not cause sensitization on laboratory animals

Germ cell mutagenicity: Geno toxicity in vitro: Test type: Ames test Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 471 **Result:** negative GLP: yes

Geno toxicity in vivo: Test type: In vivo micronucleus test Test species: mouse Cell type: Bone marrow **Application route:** Intraperitoneal **Exposure time:** 12 - 48 h Method: OECD Test Guideline 474 **Result:** negative GLP: yes

Germ cell mutagenicity - Assessment: Test on bacterial or mammalian cell cultures did not show mutagenic effects.

Carcinogenicity: Species: rat, (male and female) **Application route:** inhalation (vapor) Exposure time: 2 yrs. **Dose:** 0, 450, 900, 1800 ppm Frequency of treatment: 6 h/d, 5 d/w NOAEL: 450 ppm Method: OECD Test Guideline 451 Result: Evidence of renal carcinogenesis is not relevant to humans GLP: yes

Carcinogenicity – Assessment: No evidence of carcinogenicity in animal studies

Reproductive toxicity: Effects on fertility: Test type: Two generation study **Species:** rat (male and female) Application route: inhalation (vapor) Dose: 0, 500, 1000, 2000 ppm **Duration of Single Treatment:** 6 h Frequency of treatment: 7 d/w General Toxicity: Parent: NOAEC: 1,000 ppm General Toxicity: F1: NOAEC: 1,000 ppm Fertility: NOAEC: 2,000 ppm Symptoms: Maternal effects, sedation Method: OECD Test Guideline 416 **Result:** Animal testing did not show any effects on fertility Effects on fetal development: Species: rat Application route: inhalation (vapor) Dose: 0, 300, 1000, 3000 ppm Duration of Single Treatment: 10 d Frequency of Treatment: 6 h/d General Toxicity Maternal: NOAEC: 1,000 ppm Teratogenicity: NOAEC: 3,000 ppm Symptoms: Maternal toxicity, specific developmental abnormalities, reduced body weight, reduced number of viable fetuses. Method: OECD Test Guideline 414 Result: No teratogenic effects GLP: yes

Reproductive toxicity Assessment: No evidence of adverse effects on sexual function and fertility and on development, based on animal experiments.

Repeated dose toxicity: Species: rat (male and female) NOAEL: 250 mg/kg Application route: Oral Exposure time: 13 w Number of Exposures: 7 d/w Dose: 0, 50, 250, 1000 mg/kg bw/day Method: OECD Test Guideline 408 GLP: yes Symptoms: Kidney disorders Remarks: male rat hydrocarbon nephropathy not relevant to humans.

Aspiration toxicity No aspiration toxicity classification **Remarks:** Solvents may degrease the skin

STOT – Single Exposure: No data available

STOT – Repeated Exposure: No data available

Aromatic Solvent - CAS No. 64742-95-6

Acute oral toxicity- LD50 Oral: 2,000 mg/kg Species: Rat Remarks: Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Acute inhalation toxicity- LC50: > saturated vapor concentration Species: Rat

Acute dermal toxicity- LD50: 2,000 mg/kg Species: Rat Remarks: Skin, eye or respiratory sensitization: no irritation or sensitization detected.

Acute oral toxicity: LD50 (rat, male and female): > 5,000 mg/kg Method: OECD Test Guideline 401 GLP: yes

Acute inhalation toxicity: Remarks: No data available

Acute dermal toxicity: LD50 (rabbit, male and female): >2,000 mg/kg Method: OECD Test Guideline 402 GLP: yes

Skin corrosion/irritation

Species: rabbit **Result:** Irritating to skin

Serious eye damage/eye irritation

Species: rabbit **Result:** Irritating to eyes

Respiratory or skin sensitization

Test type: Buehler Tests **Species:** guinea pig **Result:** Did not cause sensitization on laboratory animals

Germ cell mutagenicity

Assessment: Mutagenicity classification not possible from current data

Carcinogenicity

Assessment: Not classifiable as a human carcinogen

Reproductive toxicity

Assessment: Fertility classification not possible from current data. Embryo toxicity classification is not possible from current data.

<u>STOT – single exposure</u>

Exposure Route: InhalationTarget Organs: Central Nervous SystemAssessment: May cause drowsiness or dizziness. The substance of mixture is classified as specific target organ toxicant, single exposure, Category 3 with narcotic effects.

STOT - repeated exposure: No data available

Aspiration toxicity: May be fatal if swallowed and enters airways.

Further Information:

Remarks: Symptoms of overexposure may be headache, dizziness, tiredness, nausea, and vomiting. Concentrations substantially above the TLV value may cause narcotic effects. Solvents may degrease the skin.

Light Aliphatic Solvent - CAS No. 64742-49-0

ACUTE TOXICITY

Acute oral toxicity:	Acute toxicity estimate: >5,000 mg/kg LD50 (rat, male and female)
Method: GLP:	OECD Test Guideline 402 Yes
Acute dermal toxicity:	Acute toxicity estimate: >1,100 mg/kg LD50 (rabbit, male and female): 2,000 mg/kg
Method:	OECD Test Guideline 402
GLP:	Yes
Skin corrosion/irritation: Species: rabbit	
	Exposure time: 4 h
	Result: Irritating to skin
Serious eye damage/eye Irritation:	Species: rabbit
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Result: Irritating to eyes

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Respiratory or skin Sensitization:	Test Type: Buehler Test Species: guinea pig Result: Did not cause sensitization on laboratory anima	ls
Germ Cell mutagenicity: Mutagenicity classification not possible from current data.		
Carcinogenicity:	Assessment: Not classified as a human carcinogen.	
-	Assessment: Fertility classification not possible from cu Embryotoxicity classification not possible data.	
STOT Single Exposure:	Exposure Route: inhalation Target Organs: Central Nervous System Assessment: May cause drowsiness or dizziness. The su mixture is classified as specific target orga single exposure, category 3 with narcotic e	n toxicant,
STOT Repeated Exposure:	Causes skin irritation	
Aspiration toxicity:	May be fatal if swallowed and enters airways.	

Propylene Glycol Methyl Ether Acetate CAS No 108-65-6

Acute toxicity

Acute oral toxicity: LD50 (rat, male and female): 8,532 mg/kg

Acute inhalation toxicity: Remarks: No data available

Acute dermal toxicity: LD50 (rabbit, male and female): >5,000 mg/kg Method: OECD Test Guideline 402

Skin corrosion/irritation

Species: rabbit Method: OECD Test Guideline 404 Result: No skin irritation

Serious eye damage/eye irritation

Species: rabbitResult: No eye irritationMethod: OECD Test Guideline 405GLP: yesTest substance: Information give is based on data obtained from similar substances.

Respiratory or skin sensitization

Test type: Maximization Test (GPMT) Species: guinea pig Method: OECD Test Guideline 406 Result: Did not cause sensitization on laboratory animals GLP: No Remarks: not sensitizing

Carcinogenicity

Species: rat (male and female) **Application route:** Inhalation (vapor) **Exposure time:** 2 yr **Dose:** 0, 300, 1000, 3000 ppm **Frequency of Treatment:** 6 h/d, 5 d/w NOAEL: No observed adverse effect level: 3,000 ppm Method: OECD Test Guideline 453 Result: did not display carcinogenic properties GLP: yes Assessment: Animal testing did not show any carcinogenic effects.

Reproductive toxicity

Effects on fertility:	Species: rat
	Application route: Oral
	Dose: 0, 100, 300, 1000 ppm
	General toxicity-Parent: NOAEL: 1,000 mg/kg bw
	General toxicity F1: NOAEL: 1,000 mg/kg bw
	Method: OECD Test Guideline 422
	Result: Animal testing did not show any effects on fertility.
	GLP: yes
	Remarks: Information given is based on data obtained from similar substances.
Effects on fetal	-
Development:	Species: rat
_	Application route: Inhalation
	Dose: 0, 500, 2000, 4000 ppm
	Duration of single treatment: 9 d
	Frequency of treatment: 6 h/d
	General toxicity-Maternal: NOAEL: 500 ppm
	Teratogenicity: NOAEL: 4,000 ppm
	GLP: yes

Reproductive toxicity

Genotoxicity in vitro:

Assessment: Animal testing did not show any effects on fertility. Animal testing did not show any effects on fetal development.

Germ cell mutagenicity

Test type: Ames test Metabolic activation: with and without metabolic activation. Method: OECD Test Guideline 471 Result: negative GLP: yes

Test Type: DNA damage and/or repair Test species: rat hepatocytes Metabolic activation: Without metabolic activation Method: OECD Test Guideline 482 Result: Negative GLP: yes

Germ cell Mutagenicty Assessment: Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

STOT – single exposure: No data available

STOT - repeated exposure: No data available

Repeated dose toxicity: Species: rat, (male and female) NOAEL: >1,000 mg/kg Application route: Oral Dose: 0, 100, 300, 1000 mg/kg

Aspiration toxicity: No aspiration toxicity classification

Further Information:

Remarks: Solvents may degrease the skin.

Ethylene glycol monobutyl ether acetate CAS No 112-07-2

ECOTOXICITY-

Toxicity to fish:	LC50 (Oncorhynchus mykiss (rainbow trout))): 28 mg/l Exposure time: 96 h Method: OECD Test Guideline 203
Toxicity to daphnia and Other aquatic invertebrates:	(Water flea (Daphnia magna)): 37 mg/l Exposure time: 48 h
Toxicity to algae:	Test Type: static test (Pseudokirchneriella subcapitata (green algae)): 520 mg/l
Toxicity to argae.	End point: Biomass Exposure time: 72 h Test Type: static test Method: ISO 8692
Toxicity to bacteria:	(Bacteria): 2,800 mg/l Exposure time: 18 h Test Type: growth inhibition

PERSISTENCE and DEGRADABILITY

Biodegradability:	Result: Readily biodegradable Biodegradation: 88% Exposure time: 28 d Method: OECD Test Guideline 301C
Theoretical Oxygen Demand (ThOD):	0.00210 mg/g Method: OECD Test Guideline 301B GLP: no

BIOACCUMULATIVE POTENTIAL

Bioaccumulation:	Bio concentration factor (BCF) : <100	
	Remarks: The substance has low potential for bioaccumulation.	

Partition coefficient: n-o Water:	octanol/ Log Pow: 0.83
Mobility in soil:	No data available
Other adverse effects:	No data available
Regulation:	40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone – CAA Section 602 Class I Substances.
Remarks:	This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App $A + B$).

Additional ecological

Information:	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful to aquatic life.	
N-Butyl Acetate CAS No 123-86-	<u>4</u>	
ECOTOXICITY-		
Toxicity to fish:	LC50 (Pimephales promelas (fathead minnow)): 18 mg/l Exposure time: 96 h Method: OECD Test Guideline 203 GLP: no	
Toxicity to daphnia and Other aquatic		
Invertebrates:	EC50 (Water flea (Daphnia magna)): 44 mg/l Exposure time: 48 h Test Type: static test	
Toxicity to algae:	EC50 (Desmodesmus subspicatus (green algae)): 674.7 mg/l End point: Growth rate Exposure time: 72 h	
Toxicity to daphnia and Other aquatic		
Invertebrates (Chronic Toxicity):	NOEC (Daphnia magna (Water flea)): 23 mg/l Exposure time: 21 d	
Toxicity to bacteria:	EC 50 (Tetrahymena pyriformis (Ciliate)): 356 mg/l Exposure time: 40 h Test Type: Static	

PERSISTENCE and DEGRADABILITY

Test type: aerobic Biodegradation: 83% Exposure time: 28 d Method: OECD Test Guideline 301D Remarks: Readily biodegradable, according to appropriate OECD test.
0.00169 mg/g
72%
0.0022 mg/g

BIOACCUMULATIVE POTENTIAL

Bioaccumulation:	Species: Fish
	Bio concentration factor (BCF) : <15

Partition coefficient:	
n-octanol/water:	Log Pow: 1.82

Methyl Isobutyl Ketone- CAS No. 108-10-1:

ECOTOXICITY-

Toxicity to fish: LC50 (Danio rerio (zebra fish)) : >179 mg/l Exposure Time: 96 Hours Test Type: static test Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates: EC50 (Daphnia magna (Water flea) : >200mg/l Exposure Time: 48 Hours Test Type: static test Method: OECD Test Guideline 202 GLP: yes

Toxicity to algae: EC50 (Pseudokirchneriella subcapitata (green algae): 400 mg/l End point: Growth rate Exposure Time: 96 Hours Test Type: static test

Ecotoxicology Assessment Acute aquatic toxicity: This product has no known ecotoxicological effects.

Chronic aquatic toxicity: This product has no known ecotoxicological effects.

PERSISTENCE AND DEGRADABILITY-

Biodegradability: inoculum: activated sludge **Biodegradation:** 83% **Exposure time:** 28 d **Method:** OECD Test Guideline 301F **Remarks:** Readily biodegradable

Biochemical Oxygen Demand (BOD): 1,940 mg/g

Chemical Oxygen Demand (COD): 2,160 mg/g

Theoretical Oxygen Demand (ThOD): 0.00272 mg/g

Aromatic Solvent- CAS No 64742-95-6:

ECOTOXICITY-

Toxicity to fish: Aquatic Invertebrates, Algae: Toxic: 1 < LC/EC50 <10mg/l

PERSISTENCE AND DEGRADABILITY-Biodegradability: aerobic

Result: non biodegradable

BIOACCUMULATIVE POTENTIAL-

Remarks: This substance does not accumulate or biomagnify in the environment.

Aliphatic Solvent- CAS No. 64742-49-0:

Ecotoxicity

Toxicity to fish: LC50 (Oncorhynchus mykiss (rainbow trout)): 10 mg/l **Exposure time:** 96 h

Toxicity to daphnia & otherAquatic invertebrates:EC50 (Daphnia magna (water flea)):4.5 mg/lExposure time:48 h

Toxicity to algae: EC50 (Pseudokirchneriella subcapitata (green algae)): 3.71 mg/l **Exposure time:** 96 h

Ecotoxicity Assessment Acute aquatic toxicity: Toxic to aquatic life

Chronic aquatic toxicity: Toxic to aquatic life with long lasting effects

Persistence and degradability:

Biodegradability: aerobic Inoculum: activated sludge Concentration: 20 mg/l Biodegradation: 74.30% Exposure time: 56 d GLP: yes Remarks: Inherently biodegradable

Bioaccumulative potential:

Partition coefficient: n-octanol/water **Remarks:** No data available

Regulation: 40 CFR Protection of Environment: Part 82 Protection of Stratospheric Ozone – CAA Section 602 Class I Substances.

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App. A + B).

Additional ecological

Information: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Toxic to aquatic life with long lasting effects.

Propylene glycol methyl ether acetate CAS No 108-65-6:

ECOTOXICITY-

Toxicity to fish: LC50 (Rainbow Trout): 100 mg/l Exposure Time: 96 Hours Test Type: static test Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates: EC50 (Daphnia magna (Water Flea)): 500 mg/l Exposure Time: 48 Hours Test Type: immobilization Test substance: Information given is based on data obtained from similar substances.

Toxicity to algae: EC50 (Selenastrum capricornutum (green algae)): 1,000 mg/l End Point: Growth Rate Exposure Time: 96 Hours Test Type: static test Test substance: Information given is based on data obtained from similar substances.

PERSISTENCE AND DEGRADABILITY-

Biodegradability: aerobic **Inoculum:** activated sludge **Result:** Readily biodegradable **Biodegradation:** 90% **Exposure Time:** 28 days **GLP:** yes

Biochemical Oxygen Demand (BOD): 0.36 mg/l

BIOACCUMULATIVE POTENTIAL-

Partition coefficient: n-octanol/water: Log Pow: 0.43

Mobility in soil: No data available

Regulation: 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone, CAA Section 602 Class I Substances.

Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A+B).

Additional ecological information: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful to aquatic life.

SECTION 13- DISPOSAL CONSIDERATIONS

Further information: Do not dispose of waste into sewer. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of as hazardous waste in compliance with local and national regulations.

SECTION 14- TRANSPORT INFORMATION

Transport in accordance with all federal, state and local regulations.

DOT-

UN Number: UN 1263

UN proper shipping name: Paint related material (butyl acetate, aromatic & aliphatic solvent, methyl isobutyl ketone, propylene glycol methyl ether acetate, ethylene glycol monobutyl ether acetate.) Hazard class: 3 Baseling arount H

Packing group: II

SECTION 15- REGULATORY INFORMATION

OSHA Hazards: Flammable liquid. Moderate skin & eye irritant.

SARA 302 Components: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 304: Extremely Hazardous Substances Reportable Quantity: This material does not contain any components with a Section 304 EHS reportable quantity.

SARA 311/312 Hazards: Fire hazard, Acute health hazard, Chronic health hazard

Massachusetts Right to Rhow Components:	
Product	CAS No.
Methyl Isobutyl Ketone	108-10-1
Light aliphatic naphtha	64742-49-0
n-Butyl Acetate	123-86-4
Aromatic solvent	64742-95-6

Massachusetts Right to Know Components:

Pennsylvania Right to Know Components:

Product	CAS No.
Methyl Isobutyl Ketone	108-10-1

Light aliphatic naphtha	64742-49-0
n-Butyl Acetate	123-86-4
Aromatic solvent	64742-95-6
Propylene glycol methyl ether	
acetate	108-65-6
Ethylene glycol monobutyl ether	
acetate	112-07-2

New Jersey Right to Know Components:

Product	CAS No.
Methyl Isobutyl Ketone	108-10-1
Light aliphatic naphtha	64742-49-0
n-Butyl Acetate	123-86-4
Aromatic solvent	64742-95-6
Propylene glycol methyl ether	
acetate	108-65-6
Ethylene glycol monobutyl ether	
acetate	112-07-2

California Prop. 65 Components: WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

SECTION 16- OTHER INFORMATION

References: Not available Other Special Considerations: Not available Created: 09/10/2015 Last Updated: 03/09/2016

DISCLAIMER:

The information on this MSDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, expressed or implied, regarding its correctness. Some information presented and conclusions drawn herein are from sources other than direct test data on the substance itself. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage, or expense arising out of or in any way connected with handling, storage, use, or disposal of this product. If the product is used as a component in another product, this MSDS information may not be applicable. Information is correct to the best of our knowledge at the date of the MSDS publication.