

**SECTION 1: Identification****1.1. Identification**

Product form : Mixture  
Product name : X1-2220 MED CONVERTER  
Product code : XUC02220  
Formula : XUC02220

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

No additional information available

**1.3. Details of the supplier of the safety data sheet**

Endura Manufacturing Co. Ltd.  
12425 149th Street NW  
Edmonton, T5L 2J6 - Canada  
T 1-780-451-4242 - F 1-780-452-5079  
[www.enduraaviation.com](http://www.enduraaviation.com)

**1.4. Emergency telephone number**

Emergency number : In the event of an emergency involving dangerous goods:  
in Canada call CANUTEC at 613-996-6666 or \*666 on a cellular phone.  
in the US call CHEMTREC at 800-424-9300 (Account Name for US is Polyglass Coatings)

**SECTION 2: Hazard(s) identification****2.1. Classification of the substance or mixture****GHS-US classification**

Flam. Liq. 2 H225 - Highly flammable liquid and vapor  
STOT SE 3 H336 - May cause drowsiness or dizziness

Full text of H statements : see section 16

**2.2. Label elements****GHS-US labeling**

Hazard pictograms (GHS-US) :



GHS02

GHS07

Signal word (GHS-US) : Danger

Hazard statements (GHS-US) : H225 - Highly flammable liquid and vapor  
H336 - May cause drowsiness or dizziness

Precautionary statements (GHS-US) : P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking  
P233 - Keep container tightly closed  
P240 - Ground/bond container and receiving equipment  
P241 - Use explosion-proof electrical/ventilating/lighting equipment  
P242 - Use only non-sparking tools  
P243 - Take precautionary measures against static discharge  
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray  
P271 - Use only outdoors or in a well-ventilated area  
P280 - Wear protective gloves/protective clothing/eye protection/face protection  
P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower  
P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing  
P312 - Call a poison center or a doctor if you feel unwell  
P370+P378 - In case of fire: Use dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2) to extinguish  
P403+P233 - Store in a well-ventilated place. Keep container tightly closed  
P403+P235 - Store in a well-ventilated place. Keep cool  
P405 - Store locked up  
P501 - Dispose of contents/container in accordance with all local, regional, national and international regulations

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### 2.3. Other hazards

No additional information available

### 2.4. Unknown acute toxicity (GHS US)

Not applicable

## SECTION 3: Composition/Information on ingredients

### 3.1. Substance

Not applicable

### 3.2. Mixture

Name	Product identifier	%	GHS-US classification
n-butyl acetate	(CAS No) 123-86-4	40 - 50	Flam. Liq. 3, H226 STOT SE 3, H336
heptan-2-one	(CAS No) 110-43-0	10 - 20	Flam. Liq. 3, H226 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation:vapour), H332

Full text of H-phrases: see section 16

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

- First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
- First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
- First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off all contaminated clothing immediately.
- First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.
- First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

### 4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries after inhalation : May cause drowsiness or dizziness.

### 4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

- Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.
- Unsuitable extinguishing media : Do not use a heavy water stream.

### 5.2. Special hazards arising from the substance or mixture

- Fire hazard : Highly flammable liquid and vapor.
- Explosion hazard : May form flammable/explosive vapor-air mixture.

### 5.3. Advice for firefighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Remove ignition sources. Use special care to avoid static electric charges. No naked lights. No smoking.

#### 6.1.1. For non-emergency personnel

- Emergency procedures : Evacuate unnecessary personnel.

#### 6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection. Avoid breathing dust/fume/gas/mist/vapors/spray.
- Emergency procedures : Ventilate area.

### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

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### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

### 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Additional hazards when processed : Handle empty containers with care because residual vapors are flammable.  
Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eat, drink or smoke and when leaving work. Provide good ventilation in process area to prevent formation of vapor. No naked lights. No smoking. Use only non-sparking tools. Avoid breathing dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area.

### 7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment.  
Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Keep in fireproof place. Keep container tightly closed.  
Incompatible products : Strong bases. strong acids.  
Incompatible materials : Sources of ignition. Direct sunlight. Heat sources.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

heptan-2-one (110-43-0)		
ACGIH	ACGIH TWA (ppm)	50 ppm (Methyl n-amyl ketone; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)
ACGIH	Remark (ACGIH)	Eye & skin irr
OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	465 mg/m <sup>3</sup>
OSHA	OSHA PEL (TWA) (ppm)	100 ppm
n-butyl acetate (123-86-4)		
ACGIH	ACGIH TWA (ppm)	150 ppm (n-Butyl acetate; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)
ACGIH	ACGIH STEL (ppm)	200 ppm (n-Butyl acetate; USA; Short time value; TLV - Adopted Value)
ACGIH	Remark (ACGIH)	Eye & URT irr
OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	710 mg/m <sup>3</sup>
OSHA	OSHA PEL (TWA) (ppm)	150 ppm

### 8.2. Exposure controls

Personal protective equipment : Avoid all unnecessary exposure.  
Hand protection : Wear protective gloves.  
Eye protection : Chemical goggles or safety glasses.  
Respiratory protection : Where exposure through inhalation may occur from use, respiratory protection equipment is recommended.  
Other information : When using, do not eat, drink or smoke.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state : Liquid  
Color : Colorless.  
Odor : characteristic  
Odor threshold : No data available

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pH	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: 77 °C 170.6 °F
Flash point	: -4 °C 24.8 °F
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: No data available
Explosion limits	: 1.1 - 11.4 vol %
Explosive properties	: No data available
Oxidizing properties	: No data available
Vapor pressure	: No data available
Relative density	: No data available
Relative vapor density at 20 °C	: No data available
Specific gravity / density	: 0.893 g/cm <sup>3</sup>
Solubility	: Water: Solubility in water of component(s) of the mixture : • 2,4-pentanedione: 17 g/100ml • dibutyltin dilaurate: g/100ml (20 °C) 1.43E-4 • ethyl acetate: 8 g/100ml (25 °C) • heptan-2-one: 0.421 g/100ml (20 °C, poorly soluble) • n-butyl acetate: 0.53 g/100ml (20 °C) • ethyl 3-ethoxypropionate: 9 g/100ml
Log Pow	: No data available
Auto-ignition temperature	: 407 °C 765 °F
Decomposition temperature	: No data available
Viscosity	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available

### 9.2. Other information

VOC content (Regulatory - Less water and exempt solvents)	: 892.748 g/l 7.45 lb/gal
VOC content (Material - Actual)	: 892.748 g/l 7.45 lb/gal
Percent Solids (Weight)	: 0.02 %
Percent Solids (Volume)	: 0.017 %
Percent Volatile (Weight)	: 99.978 %
Percent Volatile (Volume)	: 99.983 %

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No additional information available

### 10.2. Chemical stability

Highly flammable liquid and vapor. May form flammable/explosive vapor-air mixture.

### 10.3. Possibility of hazardous reactions

Not established.

### 10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Open flame.

### 10.5. Incompatible materials

strong acids. Strong bases.

### 10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide. May release flammable gases.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

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Acute toxicity : Not classified

<b>heptan-2-one (110-43-0)</b>	
LD50 oral rat	1670 mg/kg (Rat; Experimental value; 1600 mg/kg bodyweight; Rat)
LD50 dermal rat	10300 mg/kg (Rat; Experimental value; OECD 402: Acute Dermal Toxicity; >2000 mg/kg bodyweight; Rat)
LC50 inhalation rat (mg/l)	14 mg/l/4h (Rat; Experimental value; >16.7 mg/l/4h; Rat)
ATE US (oral)	1670.000 mg/kg body weight
ATE US (dermal)	10300.000 mg/kg body weight
ATE US (vapors)	14.000 mg/l/4h
ATE US (dust, mist)	14.000 mg/l/4h

<b>n-butyl acetate (123-86-4)</b>	
LD50 oral rat	10760 - 12789 mg/kg body weight (Rat; Equivalent or similar to OECD 423; Experimental value)
LD50 dermal rabbit	14112 mg/kg body weight (Rabbit; Experimental value; Equivalent or similar to OECD 402)
ATE US (oral)	10760.000 mg/kg body weight
ATE US (dermal)	14112.000 mg/kg body weight

Skin corrosion/irritation : Not classified  
Serious eye damage/irritation : Not classified  
Respiratory or skin sensitization : Not classified  
Germ cell mutagenicity : Not classified  
Carcinogenicity : Not classified  
  
Reproductive toxicity : Not classified  
Specific target organ toxicity (single exposure) : May cause drowsiness or dizziness.  
  
Specific target organ toxicity (repeated exposure) : Not classified  
  
Aspiration hazard : Not classified  
  
Potential Adverse human health effects and symptoms : Based on available data, the classification criteria are not met.  
Symptoms/injuries after inhalation : May cause drowsiness or dizziness.

## SECTION 12: Ecological information

### 12.1. Toxicity

<b>heptan-2-one (110-43-0)</b>	
LC50 fish 1	131 mg/l (LC50; EPA OPP 72-1; 96 h; Pimephales promelas; Flow-through system; Fresh water; Experimental value)
EC50 Daphnia 2	> 90.1 mg/l (EC50; OECD 202: Daphnia sp. Acute Immobilisation Test; 48 h; Daphnia magna; Semi-static system; Fresh water; Experimental value)
Threshold limit algae 2	98.2 mg/l (EC50; OECD 201: Alga, Growth Inhibition Test; 72 h; Pseudokirchneriella subcapitata; Static system; Fresh water; Experimental value)

<b>n-butyl acetate (123-86-4)</b>	
LC50 fish 1	18 mg/l (LC50; Equivalent or similar to OECD 203; 96 h; Pimephales promelas; Flow-through system; Fresh water; Experimental value)
EC50 Daphnia 1	44 mg/l (EC50; Other; 48 h; Daphnia sp.; Static system; Fresh water; Experimental value)
Threshold limit algae 1	674.7 mg/l (EC50; Other; 72 h; Desmodesmus subspicatus; Static system; Fresh water; Experimental value)
Threshold limit algae 2	200 mg/l (NOEC; Other; 72 h; Desmodesmus subspicatus; Static system; Fresh water; Experimental value)

### 12.2. Persistence and degradability

<b>X1-2220 MED CONVERTER</b>	
Persistence and degradability	Not established.

<b>heptan-2-one (110-43-0)</b>	
Persistence and degradability	Readily biodegradable in water. Highly mobile in soil.
BOD (% of ThOD)	0.44

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<b>n-butyl acetate (123-86-4)</b>	
Persistence and degradability	Readily biodegradable in water. Low potential for adsorption in soil. Photolysis in the air.
ThOD	2.21 g O <sub>2</sub> /g substance
BOD (% of ThOD)	0.46

### 12.3. Bioaccumulative potential

<b>X1-2220 MED CONVERTER</b>	
Bioaccumulative potential	Not established.

<b>heptan-2-one (110-43-0)</b>	
Log Pow	2.26 (Experimental value; EU Method A.8: Partition Coefficient; 30 °C; 2.26; Experimental value; EU Method A.8: Partition Coefficient; 30 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

<b>n-butyl acetate (123-86-4)</b>	
BCF fish 1	15.3 (BCF)
Log Pow	2.3 (Test data; OECD 117: Partition Coefficient (n-octanol/water), HPLC method; 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

### 12.4. Mobility in soil

<b>heptan-2-one (110-43-0)</b>	
Surface tension	0.0591 N/m (21.6 °C)
Log Koc	log Koc,EU Method C.19; 1.45; Experimental value

<b>n-butyl acetate (123-86-4)</b>	
Surface tension	0.0163 N/m (20 °C)
Log Koc	log Koc, SRC PCKOCWIN v2.0; 1.268/1.844; QSAR

### 12.5. Other adverse effects

Effect on the global warming : No known ecological damage caused by this product.

Other information : Avoid release to the environment.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container in accordance with all local, regional, national and international regulations.

Additional information : Handle empty containers with care because residual vapors are flammable.

Ecology - waste materials : Avoid release to the environment.

## SECTION 14: Transport information

### Department of Transportation (DOT)

In accordance with DOT

Transport document description : UN1263 Paint related material (including paint thinning, drying, removing, or reducing compound), 3, II

UN-No.(DOT) : UN1263

Proper Shipping Name (DOT) : Paint related material including paint thinning, drying, removing, or reducing compound

Class (DOT) : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120

Hazard labels (DOT) : 3 - Flammable liquid



Packing group (DOT) : II - Medium Danger

DOT Packaging Non Bulk (49 CFR 173.xxx) : 173

DOT Packaging Bulk (49 CFR 173.xxx) : 242

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DOT Special Provisions (49 CFR 172.102)	: 149 - When transported as a limited quantity or a consumer commodity, the maximum net capacity specified in 173.150(b)(2) of this subchapter for inner packaging may be increased to 5 L (1.3 gallons) B52 - Notwithstanding the provisions of 173.24b of this subchapter, non-reclosing pressure relief devices are authorized on DOT 57 portable tanks IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized T4 - 2.65 178.274(d)(2) Normal..... 178.275(d)(3) TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = $97 / 1 + a (tr - tf)$ Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling TP8 - A portable tank having a minimum test pressure of 1.5 bar (150 kPa) may be used when the flash point of the hazardous material transported is greater than 0 C (32 F) TP28 - A portable tank having a minimum test pressure of 2.65 bar (265 kPa) may be used provided the calculated test pressure is 2.65 bar or less based on the MAWP of the hazardous material, as defined in 178.275 of this subchapter, where the test pressure is 1.5 times the MAWP
DOT Packaging Exceptions (49 CFR 173.xxx)	: 150
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	: 5 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	: 60 L
DOT Vessel Stowage Location	: B - (i) The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) "On deck only" on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this section is exceeded
Other information	: No supplementary information available.

### TDG

Transport document description	: UN1263 PAINT RELATED MATERIAL (PAINT RELATED MATERIAL), 3, II
UN-No. (TDG)	: UN1263
TDG Proper Shipping Name	: PAINT RELATED MATERIAL
TDG Primary Hazard Classes	: 3 - Class 3 - Flammable Liquids
Packing group	: II - Medium Danger
TDG Special Provisions	: 59 - Substances that are listed by name in Schedule 1 must not be transported under this shipping name. Substances transported under this shipping name may contain not more than 20 per cent nitrocellulose if the nitrocellulose contains not more than 12.6 per cent nitrogen (by dry mass), 83 - Repealed SOR/2014-152
Explosive Limit and Limited Quantity Index	: 5
Passenger Carrying Road Vehicle or Passenger Carrying Railway Vehicle Index	: 5

### Transport by sea

UN-No. (IMDG)	: 1263
Proper Shipping Name (IMDG)	: PAINT
Class (IMDG)	: 3 - Flammable liquids
Packing group (IMDG)	: II - substances presenting medium danger

### Air transport

No additional information available

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

<b>X1-2220 MED CONVERTER</b>
Not listed on the United States TSCA (Toxic Substances Control Act) inventory
<b>heptan-2-one (110-43-0)</b>
Listed on the United States TSCA (Toxic Substances Control Act) inventory

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### n-butyl acetate (123-86-4)

Listed on the United States TSCA (Toxic Substances Control Act) inventory  
Not listed on SARA Section 313 (Specific toxic chemical listings)

CERCLA RQ 5000 lb

### 15.2. International regulations

#### CANADA

No additional information available

#### EU-Regulations

No additional information available

#### National regulations

No additional information available

### 15.3. US State regulations

#### heptan-2-one (110-43-0)

U.S. - New Jersey - Right to Know Hazardous Substance List

#### n-butyl acetate (123-86-4)

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

## SECTION 16: Other information

Other information : None.

Full text of H-phrases:

H225	Highly flammable liquid and vapor
H226	Flammable liquid and vapor
H302	Harmful if swallowed
H332	Harmful if inhaled
H336	May cause drowsiness or dizziness

SDS US Endura

*The information contained here has been compiled from sources considered by Endura Manufacturing Co. Ltd to be dependable and is accurate to the best of the Company's knowledge. However, neither Endura Manufacturing Co. Ltd or any of its subsidiaries assume any liability whatsoever for the accuracy or completeness of the information contained herein. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.*

*\*\*For two component products please consult SDS of both components for proper safety and handling.*