



Reviewed on 08/11/2025 Printing date 08/11/2025

### 1 Identification

· Product identifier

· Trade name: 777B 777 SERIES BINDER

· Article number: 777B

· Details of the supplier of the safety data sheet

· Manufacturer/Supplier:

NorthStar is a product of Lusid Technologies Inc

4725 S Camp Kearns Road

Kearns, UT 84118 (801) 966-5300

info@lusidtechnologies.com

· Information department: Product safety department

· Emergency telephone number:

24 Hrs Emergency Contact:

**INFOTRAC** 1-800-535-5053

## 2 Hazard(s) identification

· Classification of the substance or mixture



GHS02 Flame

Flammable Liquids 2

H225 Highly flammable liquid and vapor.



GHS08 Health hazard

Carcinogenicity 1A H350 May cause cancer.

Toxic to Reproduction 1B H360 May damage fertility or the unborn child.

Specific Target Organ Toxicity - Repeated Exposure H373 May cause damage to the hearing organs through prolonged or repeated exposure.



Sensitization - Skin 1 H317 May cause an allergic skin reaction.

Specific Target Organ Toxicity - Single Exposure 3 H336 May cause drowsiness or dizziness.

- · Label elements
- GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

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## Safety Data Sheet acc. to OSHA HCS

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Trade name: 777B 777 SERIES BINDER

### · Hazard pictograms







GHS02 GHS07

· Signal word Danger

### · Hazard-determining components of labeling:

n-butyl acetate

ethylbenzene

bis(1,2,2,6,6-pentamethyl-4-piperidyl)sebacate

2-ethylhexanoic acid

#### · Hazard statements

Highly flammable liquid and vapor.

May cause an allergic skin reaction.

May cause cancer.

May damage fertility or the unborn child.

May cause drowsiness or dizziness.

May cause damage to the hearing organs through prolonged or repeated exposure.

## Precautionary statements

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

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

Ground/bond container and receiving equipment.

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

Use only non-sparking tools.

Take precautionary measures against static discharge.

Do not breathe dust/fume/gas/mist/vapors/spray.

Use only outdoors or in a well-ventilated area.

Contaminated work clothing must not be allowed out of the workplace.

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

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

IF exposed or concerned: Get medical advice/attention.

Call a poison center/doctor if you feel unwell.

Specific treatment (see on this label).

Get medical advice/attention if you feel unwell.

If skin irritation or rash occurs: Get medical advice/attention.

Wash contaminated clothing before reuse.

In case of fire: Use CO2, powder or water spray to extinguish.

Store in a well-ventilated place. Keep container tightly closed.

Store in a well-ventilated place. Keep cool.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

#### · Classification system:

#### · NFPA ratings (scale 0 - 4)



Health = 0 Fire = 3 Reactivity = 0

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· HMIS-ratings (scale 0 - 4)

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Health = \*0 Fire = 3REACTIVITY 0 Reactivity = 0

- · Other hazards
- · Results of PBT and vPvB assessment
- · PBT: Not applicable. · vPvB: Not applicable.

## 3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · Description: Mixture of the substances listed below with nonhazardous additions.

· Dangerous components:		
123-86-4	n-butyl acetate	10-25%
110-43-0	heptan-2-one	10-25%
1330-20-7		2.5-10%
1	ethylbenzene	≤2.5%
41556-26-7	bis(1,2,2,6,6-pentamethyl-4-piperidyl)sebacate	≤2.5%
64-17-5	ethanol	≤2.5%
	pentane-2,4-dione	≤2.5%
149-57-5	2-ethylhexanoic acid	≤2.5%
67-56-1	methanol	≤2.5%

### 4 First-aid measures

- · Description of first aid measures
- · General information:

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

· After inhalation:

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

- · After skin contact: Immediately wash with water and soap and rinse thoroughly.
- · After eye contact: Rinse opened eye for several minutes under running water.
- · After swallowing: If symptoms persist consult doctor.
- · Information for doctor:
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed No further relevant information available.

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## 5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents:

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- For safety reasons unsuitable extinguishing agents: Water with full jet
- · Special hazards arising from the substance or mixture

During heating or in case of fire poisonous gases are produced.

- · Advice for firefighters
- · Protective equipment: Mouth respiratory protective device.

### 6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Mount respiratory protective device.

Wear protective equipment. Keep unprotected persons away.

- · Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to section 13.

Ensure adequate ventilation.

Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

Protective Action Criteria for Chemicals

123-86-4	n-butyl acetate	5 ppm
110-43-0	heptan-2-one	150 ppm
1330-20-7	xylene	130 ppm
100-41-4	ethylbenzene	33 ppm
64-17-5	ethanol	1,800 ppn
123-54-6	pentane-2,4-dione	75 ppm
149-57-5	2-ethylhexanoic acid	15 mg/m³
67-56-1	methanol	530 ppm
122-99-6	2-phenoxyethanol	1.5 ppm
77-58-7	dibutyltin dilaurate	1.1 mg/m <sup>3</sup>
67-63-0	propan-2-ol	400 ppm
PAC-2:		
123-86-4	n-butyl acetate	200 ppm
110-43-0	heptan-2-one	670 ppm
1330-20-7	xylene	920* ppm
100-41-4	ethylbenzene	1100 ppm
64-17-5	ethanol	3300* ppn
123-54-6	pentane-2,4-dione	110 ppm
149-57-5	2-ethylhexanoic acid	99 mg/m³
67-56-1	methanol	2100 ppm

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122-99-6	2-phenoxyethanol	16 ppm
77-58-7	dibutyltin dilaurate	3.8 mg/m3
67-63-0	propan-2-ol	2000* ppm
· PAC-3:		·
123-86-4	n-butyl acetate	3000* ppm
110-43-0	heptan-2-one	4000* ppm
1330-20-7	xylene	2500* ppm
100-41-4	ethylbenzene	1800 ppm
64-17-5	ethanol	15000* ppm
123-54-6	pentane-2,4-dione	200 ppm
149-57-5	2-ethylhexanoic acid	590 mg/m³
67-56-1	methanol	7200 ppm
122-99-6	2-phenoxyethanol	97 ppm
77-58-7	dibutyltin dilaurate	23 mg/m3
67-63-0	propan-2-ol	12000** ppm

## 7 Handling and storage

- · Handling:
- · Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

Prevent formation of aerosols.

· Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Keep respiratory protective device available.

- · Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles: Store in a cool location.
- Information about storage in one common storage facility: Not required.
- Further information about storage conditions:

Keep receptacle tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

· Specific end use(s) No further relevant information available.

## 8 Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see section 7.
- · Control parameters
- · Components with limit values that require monitoring at the workplace:

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.

At this time, the remaining constituent has no known exposure limits.

## 123-86-4 n-butyl acetate

PEL Long-term value: 710 mg/m<sup>3</sup>, 150 ppm

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REL	Short-term value: 950 mg/m³, 200 ppm Long-term value: 710 mg/m³, 150 ppm	(-)
TLV	Short-term value: 712 mg/m³, 150 ppm Long-term value: 238 mg/m³, 50 ppm	
110-	43-0 heptan-2-one	
PEL	Long-term value: 465 mg/m³, 100 ppm	
REL	Long-term value: 465 mg/m³, 100 ppm	
TLV	Long-term value: 50 ppm	
1330	1-20-7 xylene	
PEL	Long-term value: 435 mg/m³, 100 ppm	
REL	Short-term value: 655 mg/m³, 150 ppm Long-term value: 435 mg/m³, 100 ppm	
TLV	Long-term value: 20 ppm BEI, A4	
100-	41-4 ethylbenzene	
	Long-term value: 435 mg/m³, 100 ppm	
	Short-term value: 545 mg/m³, 125 ppm Long-term value: 435 mg/m³, 100 ppm	
TLV	Long-term value: 20 ppm OTO, BEI, A3	
64-1	7-5 ethanol	
PEL	Long-term value: 1900 mg/m³, 1000 ppm	
	Long-term value: 1900 mg/m³, 1000 ppm	
	Short-term value: 1880 mg/m³, 1000 ppm	
123-	54-6 pentane-2,4-dione	
	Long-term value: 102 mg/m³, 25 ppm Skin	
149-	57-5 2-ethylhexanoic acid	
	Long-term value: 5* mg/m³	
	*as inhalable fraction and vapor	
67-5	6-1 methanol	
PEL	Long-term value: 260 mg/m³, 200 ppm	
REL	Short-term value: 325 mg/m³, 250 ppm Long-term value: 260 mg/m³, 200 ppm Skin	
TLV	Short-term value: 328 mg/m³, 250 ppm Long-term value: 262 mg/m³, 200 ppm Skin; BEI	
Inar	edients with biological limit values:	
	0-20-7 xylene	
	0.3 g/g creatinine	
	Medium: urine	
	Time: end of shift	
	Parameter: Methylhippuric acids	

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#### 100-41-4 ethylbenzene

BEI 0.15 g/g creatinine Medium: urine

Time: end of shift

Parameter: Sum of mandelic acid and phenylglyoxylic acid (nonspecific)

#### 67-56-1 methanol

BEI 15 mg/L

Medium: urine Time: end of shift

Parameter: Methanol (background, nonspecific)

- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- Personal protective equipment:
- · General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Store protective clothing separately.

Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

#### · Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

#### · Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:



Tightly sealed goggles

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9 Physical and	chemica	l properties
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· Information on basic physical and chemical properties

· General Information

· Appearance:

Form: Liquid Whitish
Odor: Characteristic
Odor threshold: Not determined.

· pH-value: Not determined (pH N/A in solvent coatings)

· Change in condition

Melting point/Melting range: Undetermined.

**Boiling point/Boiling range:** 124-128 °C (255.2-262.4 °F)

Flash point: 13 °C (55.4 °F)
 Flammability: Highly flammable.

• **Auto igniting:** 370 °C (698 °F)

· Decomposition temperature: Not determined.

· Ignition temperature: Product is not selfigniting.

Danger of explosion: Product is not explosive. However, formation of explosive air/

vapor mixtures are possible.

· Explosion limits:

**Lower:** 1 Vol % **Upper:** 7.5 Vol %

• Vapor pressure at 20 °C (68 °F): 10.7 hPa (8 mm Hg) • Vapor pressure at 50 °C (122 °F): 55 hPa (41.3 mm Hg)

Density at 20 °C (68 °F): 1.0241 g/cm³ (8.5461 lbs/gal)

Relative density
 Vapor density
 Evaporation rate
 Not determined.
 Not determined.

· Solubility in / Miscibility with

Water: Not miscible or difficult to mix.

· Partition coefficient (n-octanol/water): Not determined.

· Viscosity:

Dynamic at 20 °C (68 °F): 1,300 mPas
Kinematic: Not determined.

· Solvent content:

Organic solvents: 40.0 % VOC content: 40.04 %

310.0 g/l / 2.59 lb/gal

Solids content: 64.0 %

• Other information No further relevant information available.

## 10 Stability and reactivity

· Reactivity No further relevant information available.

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- · Chemical stability
- Thermal decomposition / conditions to be avoided:
- No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

## 11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:

#### · LD/LC50 values that are relevant for classification:

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

Oral LD50 1,670 mg/kg (rat)

Dermal LD50 12,600 mg/kg (rabbit)

- Primary irritant effect:
- · on the skin: No irritant effect.
- · on the eye: No irritating effect.
- · Sensitization: Sensitization possible through skin contact.
- Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations:

Irritant

· Carcinogenic categories

· IARC (Inte	rnational Agency for Research on Cancer)	
1330-20-7	xylene	3
	ethylbenzene	2B
64-17-5		1
67-63-0	propan-2-ol	3

## · NTP (National Toxicology Program)

None of the ingredients is listed.

## OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

## 12 Ecological information

- · Toxicity
- Aquatic toxicity: No further relevant information available.
- Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

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· Results of PBT and vPvB assessment

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- · **PBT:** Not applicable. · vPvB: Not applicable.
- Other adverse effects No further relevant information available.

## 13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

UN-Number	
DOT, IMDG, IATA	UN1263
UN proper shipping name	
DOT	Paint
IMDG, IATA	PAINT
Transport hazard class(es)	
DOT	
RAMANE COUD	
Class	3 Flammable liquids
Label	3
IMDG, IATA	
<b>2</b> C, 1.1111	
Class	3 Flammable liquids
Label	3
Packing group	
DOT, IMDG, IATA	III
Environmental hazards:	
Marine pollutant:	No
Special precautions for user	Warning: Flammable liquids
	<b>de):</b> 30

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Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	
· DOT · Quantity limitations	On passenger aircraft/rail: 60 L On cargo aircraft only: 220 L
· IMDG · Limited quantities (LQ) · Excepted quantities (EQ)	5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· UN "Model Regulation":	UN 1263 PAINT, 3, III

## 15 Regulatory information

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

· Sara	55 (extremely hazardous substances):		
	e ingredients is listed.		
	13 (Specific toxic chemical listings):		
1330-20-7	xylene		
100-41-4	ethylbenzene		
67-56-1	methanol		
122-99-6	2-phenoxyethanol		
67-63-0	propan-2-ol		
· TSCA (To	xic Substances Control Act):		
All compor	nents have the value ACTIVE.		
· Hazardou	s Air Pollutants		
1330-20-7	xylene		
100-41-4	ethylbenzene		
67-56-1	methanol		
· Propositio	· Proposition 65		
· Chemicals	s known to cause cancer:		
100 11 1	100 11 1 11 11		

100-41-4 ethylbenzene

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

64-17-5	
67-56-1	methanol

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### · Carcinogenic categories

· EPA (Envi	ronmental Protection Agency)	
1330-20-7	xylene	1
100-41-4	ethylbenzene	D
· TLV (Thre	· TLV (Threshold Limit Value)	
1330-20-7	xylene	A4
100-41-4	ethylbenzene	A3
64-17-5	ethanol	A3
77-58-7	dibutyltin dilaurate	A4
67-63-0	propan-2-ol	A4
NIOSH-Ca (National Institute for Occupational Safety and Health)		

## $^{\cdot}$ NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

#### · GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

#### · Hazard pictograms







GHS02 GHS07 GHS08

## · Signal word Danger

### Hazard-determining components of labeling:

n-butyl acetate ethylbenzene

bis(1,2,2,6,6-pentamethyl-4-piperidyl)sebacate

2-ethylhexanoic acid

#### · Hazard statements

Highly flammable liquid and vapor.

May cause an allergic skin reaction.

May cause cancer.

May damage fertility or the unborn child.

May cause drowsiness or dizziness.

May cause damage to the hearing organs through prolonged or repeated exposure.

#### · Precautionary statements

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

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

Ground/bond container and receiving equipment.

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

Use only non-sparking tools.

Take precautionary measures against static discharge.

Do not breathe dust/fume/gas/mist/vapors/spray.

Use only outdoors or in a well-ventilated area.

Contaminated work clothing must not be allowed out of the workplace.

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

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

IF exposed or concerned: Get medical advice/attention.

Call a poison center/doctor if you feel unwell.

Specific treatment (see on this label).

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Get medical advice/attention if you feel unwell.

If skin irritation or rash occurs: Get medical advice/attention.

Wash contaminated clothing before reuse.

In case of fire: Use CO2, powder or water spray to extinguish.

Store in a well-ventilated place. Keep container tightly closed.

Store in a well-ventilated place. Keep cool.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

- · National regulations:
- · Additional classification according to Decree on Hazardous Materials:

Carcinogenic hazardous material group III (dangerous).

· Information about limitation of use:

Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation. Exceptions can be made by the authorities in certain cases.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

## 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Department issuing SDS: Environment protection department.
- · Contact: Product Safety Dept.
- · Date of preparation / last revision 08/11/2025 / 9
- · Abbreviations and acronyms:

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

BEI: Biological Exposure Limit

Flammable Liquids 2: Flammable liquids - Category 2

Sensitization - Skin 1: Skin sensitisation - Category 1

Carcinogenicity 1A: Carcinogenicity - Category 1A

Toxic to Reproduction 1B: Reproductive toxicity - Category 1B

Specific Target Organ Toxicity - Single Exposure 3: Specific target organ toxicity (single exposure) - Category 3 Specific Target Organ Toxicity - Repeated Exposure 2: Specific target organ toxicity (repeated exposure) - Category 2

\* Data compared to the previous version altered.