分類番号	NL-0001E	名	SDS	ページ	1/1
改訂日	2015. 10. 09	称	NLG ADHESIVE	改訂番号	Rev.3

# 改訂履歴表

改訂 番号	改訂日	承認	確認	作成	改 訂 内 容
0	2005. 02. 09	丹生	石切山	内田	新規制定
1	2009. 10. 19		青木	藤間	Date prepared の変更
2	2015. 06. 18		平良	齊藤	GHS 書式へ変更
3	2015. 10. 09	後井	番	齊藤	MSDS→SDS への変更

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## SAFETY DATA SHEET

## 1. PRODUCT & COMPANY IDENTIFICATION

PRODUCT NAME : NLG ADHESIVE

**COMPANY IDENTIFICATION** 

Company name : NITTA CORPORATION (INDUSTRIAL PRODUCTS DIV.)

Address :172,IKEZAWA-CHO, YAMATOKOHRIYAMA-SHI, NARA, 639-1085, JAPAN

Department :PRODUCT DEVELOPMENT DEPARTMENT

Telephone :+81-743-56-5761 Fax :+81-743-56-0718

Emergency telephone :+81-743-56-0581(NARA FACTORY)

#### 2. HAZARD IDENTIFICATION

#### GHS CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

#### PHYSICAL HAZARDS

 Explosives :Not applicable Flammable gases :Not applicable • Flammable aerosols :Not applicable · Oxidizing gases :Not applicable Gases under pressure :Not applicable • Flammable liquids :Category 2 Flammable solids :Not applicable Self-reactive substances and mixtures :Not applicable · Pyrophoric liquids :Not classified · Pyrophoric solids :Not applicable Self-heating substances and mixtures :Not classified Substances and mixture which, in contact with water, emit flammable gases :Not applicable Oxidizing liquids :Not applicable Oxidizing solids :Not applicable Organic peroxides :Not applicable Corrosive to metals :Not classified

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#### **HEALTH HAZARDS**

• Acute toxicity (oral) :Category 5

Acute toxicity (skin)
Not classified

Acute toxicity (inhalation: gas)
Acute toxicity (inhalation: vapor)
Category 5

Acute toxicity (inhalation: dust, mist)
Not applicable(dust)

Acute toxicity (inhalation: dust, mist)
Classification not possible(mist)

Skin corrosion / irritation
Category 2

Serious eye damages / eye irritation
Category 2B

Respiratory sensitization
Classification not possible

Skin sensitization
Classification not possible

Germ cell mutagenicity
Not classified

Carcinogenicity
Not classified

Reproductive toxicity
Not classified

Specific target organ toxicity; single exposure
Category1(central nervous)

system)

:Category 2 (kidney)

:Category 3(respiratory tract

irritation)

Specific target organ toxicity; repeated exposure
Category 1(central nervous)

system ,peripheral nervous)

• Aspiration hazard :Category 2

## ENVIRONMENTAL HAZARDS

Aquatic toxicity (acute)
Aquatic toxicity (chronic)
Not classified

### GHS LABEL ELEMENTS INCLUDING PRECAUTIONARY STATEMENTS

SYMBOL :







HAZARD STATEMENT : Highly flammable liquid and water

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May be harmful if swallowed

Causes serious eye irritation

May damage fertility or the unborn child

Causes damage to organs

May cause respiratory

May cause drowsiness or dizziness

Cause damage to organs through prolonged or repeated exposure

#### PRECAUTIONARY STATEMENTS

#### [Prevention]

- Avoid inhalation, ingestion, eyes contact.
- Do not eat, drink or smoke when using this product.
- Use in a well-ventilated area.
- Flush thoroughly after handling.
- Keep away from heat/sparks/open flames/hot surfaces.

## [Response]

• Inhalation : Move to fresh air and keep at rest in a position comfortable for breathing.

• Ingestion : Rinse mouth with water.

• Eyes contact : Rinse cautiously with water for several minutes.

• In case of fire : Use dry chemical powder, carbon dioxide, foam, water spray.

#### [Storage]

- Store in a well-ventilated, cool and dry place.
- Keep away from sources of ignition.

## [Disposal]

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

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

## PRODUCT DESCRIPTION : Mixture

Ingredients	CAS No.	METI No.	Chemical structure	% by
				weight
Polyurethane	_	_	N.A	20
2-Butanone :Methyl Ethyl	78-93-3	_	CH3COC2H5	20
Ketone				
Acetic Acid, Ethyl Ester:	141-78-6	_	CH3COOC2H5	60

E41:-1 A 4 . 4 . (E A)		
Ethyl Acetate(E-A)		
2011)111000000(211)		

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## 4. FIRST AID MEASURES

#### **INHALATION**

- Move to fresh air and keep at rest in a position comfortable for breathing.
- Get medical advice/attention if you feel unwell.

#### **EYES CONTACT**

- Rinse cautiously with water for several minutes.
- If eye irritation persists, get medical advice/attention.

#### **INGESTION**

• Rinse mouth with water immediately.

## 5. FIRE-FIGHTING MEASURES

#### SUITABLE EXTINGUISHING MEDIA

Dry chemical powder, carbon dioxide, foam, water spray

## SPECIAL PROTECTIVE FOR FIRE- FIGHTERS

 Because hazardous gases may be generated during fire-fighting, firefighters have to wear appropriate protective equipment (gloves, glasses, and mask, self-contained breathing apparatus)

## 6. ACCIDENTAL RELEASE MEASURES

- Use extra personal protective equipment. Keep people away from and up wind of spill/leak.
- Prevent product from entering drain.
- · Absorb spilled material in dry sand or inert absorbent before recovering it into an airtight container.
- In case of large amount of spillage, contain a spill by banding.
- · Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulation.

## 7. HANDLING AND STORAGE

### HANDLING

- Avoid contact with eyes, inhale the abrasion dust of this product.
- Take measures to prevent the buildup of electrostatic.
- Use explosion-proof equipment.
- Prevent generation of vapor or mist.

#### **STORAGE**

- Store in a well-ventilated, cool and dry place.
- Store away from incompatible materials such as oxidizing agents.
- Keep away from flame.

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## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Ingredients	CONTROL	OCCUPATIONAL EXPOSURE LIMITS ppm(mg/m³)		
	LIMIT	J.Soc.Occup.Health	ACGIH	OSHA
	ppm(mg/m <sup>3</sup> )			
Polyurethane	N.A	NA	N.A	N.A
2-Butanone :Methyl	200/N.A	200(590)/1998/N.A	200(590)/1998/TLV-TWA	200/N.A/PEL-TWA
Ethyl Ketone			300(885)/1998/TLV-STEL	
Acetic Acid, Ethyl	400/N.A	200(720)/1998/N.A.	400(1440)/1998/TLV-TWA	400/N.A/PEL-TWA
Ester: Ethyl				
Acetate(E-A)				

## Engineering control

• Install a closed system or local exhaust. Also install safety shower and eye bath.

## PERSONAL PROTECTIVE EQUIPMENT

- Half or full face piece respirator, self-contained breathing apparatus(SCBA), supplied air respirator, etc.
- Impervious gloves.
- · Safety goggles.
- impervious protective clothing.
- · Protective boots, if the situation requires.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

General Information			
• Form : Liquid	• Specific Density : 0.81(MEK) 0.90(E-A)		
· Color : colorless	• Vapor density(AIR=1): 3.8(Re) 1.1(Me)		
• Odor : Acetone like, Ester like odor	• Vapor pressure : 1mmHg at 108°C(Re)		
	95mmHg at 20℃(Me)		
• Boiling Range : 79.6℃(MEK)	• Flash point : -9°C(MEK) -4°C(E-A)(Close cup)		
77°C(E-A)	• Self-igniting : -		
• Melting point : -86°C(MEK)			
-82.4°C(E-A)			
• Flammable Limits: 1.7~11.4% (MEK)	• Water solubility: 1ml/4ml Water at 20°C(MEK)		
2.0~11.5% (EA)	1ml/10ml Water at 25°C(E-A)		
	Other solvent miscible: Many organic solvents		

## 10. STABILITY AND REACTIVITY

• Chemical Stability : Stable under normal temperatures and pressures.

- Hazardous Decomposition Products  $\div Carbon$  monoxide, Carbon dioxide

Conditions to Avoid
Spark, Open flame, Static discharge

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## 11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY [ORAL, SKIN, INHALATION]

Eye:Irritant(Rabbit) Skin:Irritant(Rabbit)

Toxic; LD50(Oral-Rat)6.86ml/kg(MEK) LD50(Oral-Rat)5600mg/kg(E-A)

### 12. ECOLOGICAL INFORMATION

**ENVIRONMENTAL TOXICITY** 

MEK

Pimephales promeals:LC50(96hrs) ;3,200mmg/l.

Daphnis pulex:LC50(48hrs);530mg/l/

E-A

Fish: LC50=270/333mg/l LC100=360/360mg/l/

#### 13. DISPOSAL CONSIDERATIONS

• Dispose in accordance with local / regional / national / international regulations.

## 14. TRANSPORT INFORMATION

Land : Transport in accordance with your country and regions regulations.

Sea :Transport in accordance with IMDG Code.

Air :Transport in accordance with ICAO-TI/IATA-DGR.

• UN number :1133

Proper shipping name: Adhesives containing flammable liquid

• Hazard class :3

· Packing group: II

## 15. REGULATORY INFORMATION

• Observe the law or regulations of your country about this material.

## 16. OTHER INFORMATION

The information contained herein is furnished based on various literatures currently available, but may not cover all the facts. It is likely to be revised by a new finding.

It is therefore requested to handle with adequate care.

Close attention is necessary for handling because there is an unknown hazardous property in all chemicals. In user's responsibility, please set safe use conditions.