Issued Amended SDS No. 18-Apr-12 14-Dec-16 52009300000

Safety Data Sheet

1 Identification:

Product Name NX Hardener

Product explanation type

URETHANE COATING/HARDENER

Intended Use

Industrial coating for metal and plastics

Company name

Edogawagosei Co., Ltd.

Address

84-2 Singo Higashimatsuyama-shi Saitama, Japan

Department in charge Phone

Technical division 81-493-26-0781 81-493-26-0786

Fax Emergency number

81-493-26-0781

2 Hazard identification Symbols









Signal word

DANGER

Hazard class(GHS chapter)

Flammable liquids

Acute toxicity Oral

Skin

Inhalation/Gases
Inhalation/Vapors
Inhalation/Dust, Mist

Skin corrosion/irritation

Serious eye damage/eye irritation

Respiratory sensitization Skin sensitization Germ cell mutagenicity Carcinogenicity Toxic to reproduction

Specific target organ system toxicity

single exposure

Specific target organ system toxicity

repeated exposure

Aspiration hazard

Acute hazards to the aquatic environmer

Long-term hazards to the aquatic environment

Hazard to the ozone layer

Category Physical hazard statements

2 High flammable liquid and vapor

Not classified.

Not classified.

Exempt classification.

Not classified.

Exempt classification.

2 Causes skin irritation.2A Causes serious eye irritation.

Not classified.
 Not classified.

Not classified.

Suspected of causing cancer.

1B May damage fertility or the unborn child.

1 Causes damage to organs....

[liver,kidney,respiratory organ,central nervous system]

Causes damage to organs. through prolonged or repeated exposure.

[nervous system,respiratory organ]

Not classified.

1 Very toxic to aquatic life.

3 Harmful to aquatic life with long lasting effects.

Not classified.

3 Composition/information on ingredients;

Distinction of a single product-mixture: mixture

Ingredients	CAS No.	contents(%)	note
n-butyl acetate	123-86-4	22.0%	
ethylbenzene	100-41-4	11.0%	
xylene	1330-20-7	11.0%	
hexamethylene diisocyanate	822-06-0	0.2%	
	-		

4 First-aid measures:

IF IN EYES:

- Immediately rinse your eyes under clean running water for at least 15 minutes.
- · By lifting the upper and lower eyelids, make a complete cleaning of the eye.
- · Remove contact lenses, if present and easy to do.
- Immediately call a POISON CENTER or doctor/physician if you feel unwell.

IF ON SKIN:

- Immediately wipe the product off your skin with a cloth.
- · Wash away the matter thoroughly with water and soap or a with skin cleaning detergent.
- If the contacted skin changes in appearance or gives you pain, consult a doctor.

IF INHALED:

- If a vapor or gas is inhaled in large amounts, immediately move to a clean place for a breath of fresh air and take a rest, keeping yourself warm.
- Care should be taken so that anything thrown up may not be swallowed.
- · In case of suffocation, artificial respiration should be practiced.
- To perform (CPR) cardiopulmonary resuscitation if necessary.
- SDS and labels are shown in the physician, to receive the diagnosis.

IF SWALLOWED

- Immediately call a POISON CENTER or doctor/physician.
- When a patient vomits don't swallow vomit. Lie face-down or on the left side and secure an airway.

5	Fire	-fig	hting	meas	ures:

oB						
Suitable extinguishing media						
Water [—] Carbon dioxide [O]	Form	(0)	Dry chemical	[0]	Dry sand	[O]
Specific hazards arising from the chemical						
May product harmful fumes if burning.						
Specific protective actions for fire-fighters						
144						

- Wear appropriate protectors (such as heat-resistant clothes).
- · Move any combustible materials away from the fire.
- · Keep an appropriate fire extinguisher at the ready to guard against ignition.
- · Do not over water.

6 Accidental release measures;

Personal precautions, protective equipment and emergency procedures

- Wear protective gloves/eye protection/face protection.
- · When the leakage is made to leave plenty personnel from the area, moving to windward.

Environmental precautions

- Prevent the inflow rivers, such as water pipes to any available means, you do not want to cause damage to the environment.
- If the cause pollution in rivers and water pipes etc., please contact the relevant organizations.

Methods and materials for containment and cleaning up

- Remove any nearby ignition or heat sources and combustible materials.
- Keep an appropriate fire extinguisher at the ready to guard against ignition.
- The outflow of mass enclosed in the embankment to prevent leakage.
- · For recovery, use tools made of materials such as would not produce sparks on impact or due to static electricity.
- Put the leakage into an gastight container and move it to a safe place.
- Dispose of any adhered substance and wastes in accordance with the related laws and regulations.

7 Handling and storage;

Precautions for safe handling

- · Handle the product in a well-ventilated place.
- Completely seal the container after closing it.
- Do not use any heat sources or spark-producing devices nearby.
- To guard against static electricity, short the equipment to ground and use only explosion proof (increased safety type) electric apparatus.
- · Immerse the used rags and spray cans sin water until they are disposed of.
- It touches the skin, the mucous membrane or clothes, and so as not to catch one's eye, the
 protective equipment is worn.
- After handling, neither the hand nor the face, etc. wash well, and bring the pollution protection tool such as gloves in to the rest room etc.
- When handling the product in an enclosed space, furnish an appropriate local exhauster and wear an appropriate protectors.
- Do not eat, drink or smoke when using this product.

Conditions for safe storage, including any incompatibility

- Mixed with an oxidizing agent storage is prohibited.
- · Protect from sunlight. Keep cool.
- · Store in a closed container.
- · Keep away from heat.

8 Exposure controls/personal protection

Exposure limit values

Chemical name	CAS No.	contents(%)	ACGIH2002 TWA	
n-butyl acetate	123-86-4	22.0%	-	
ethylbenzene	100-41-4	11.0%	20 ppm	
xylene	1330-20-7	11.0%		
hexamethylene diisocyanate	822-06-0	0.2%	0.005 ppm	

Facility and equipment measures

- · Use equipment of the explosion proof type.
- · Equipment to seal the source of the steam, or providing a local exhaust ventilation.
- · Safety shower, restroom, providing a place near an eyewash facility handling.
- · Steam to prevent the retention device is installed exhaust

Personal protective equipment

- · In case of insufficient ventilation, wear suitable respiratory equipment.
- Wear protective gloves/protective clothing/eye protection.
- · For electrostatic coating, wear current-carrying shoes.
- Do not eat, drink or smoke when using this product.

9 Physical and chemical properties;

Appearance	7	Liquid	II	Color		Clea	r
Odor	3	Solvent odor		pН	1		
Melting point		-	°C	Freezing point		-	°C
Initial boiling point	4	124.0	°C	Flash point		22.0	°C
Auto-ignition point	1	370.0	°C	Density		V—	
Explosive limit (upper)	1	15.0	%	Explosive limit (lower)	0	1,1	%
Vapor pressure		2000(25°C)	Pa	Solubility		Insoluble	
Partition coefficient:n-octanol/water	1	=======================================		Viscosity		()	mm^2/s

10 Stability and reactivity;

Chemical stability

- · Reactions at high temperatures
- · Cause reaction on contact with water
- · Cause reaction on contact with acids, alkali

Conditions to avoid

· Heating or contact with incompatible materials

Incompatible materials

· Strong oxidizing agents, powdered metals, amines, moisture

Hazardous decomposition products

· Harmful gas is generated

11 Toxicological information

Acute toxicity

Oral The acute toxicity of a mixture according to the GHS.

Category - (Not classified.)

Skin The acute toxicity of a mixture according to the GHS.

Category - (Not classified.)

Inhalation(vapor The acute toxicity of a mixture according to the GHS.

Category Exempt classification.

Inhalation(gas) The acute toxicity of a mixture according to the GHS.

Category - (Not classified.)

Inhalation(mist) The acute toxicity of a mixture according to the GHS.

Category Exempt classification.

Skin corrosion/irritation

Wear protective gloves.

To inspect the skin prior to use, keep all wounds properly protected. The skin corrosion or irritation of a mixture according to the GHS.

Category 2 (Causes skin irritation.)

- · Wash...thoroughly after handing.
- Wear protective gloves.

Serious eye damage/irritation

The serious eye damage and irritation of a mixture according to the GHS.

Category 2A (Causes serious eye irritation.)

· Wear protective eye protection/face protection.

Respiratory/Skin sensitizer

The respiratory and skin sensitizer of a mixture according to the GHS.

Category - (Not classified.)

Germ cell mutagenicity

The germ cell mutagenicity of a mixture according to the GHS.

Category - (Not classified.)

Carcinogenicity

The carcinogenicity of a mixture according to the GHS.

Category 2

- Obtain special instructions before use.
- Do not handle until all safety precautions have been read and understood.
- Use personal protective equipment as required.

Toxic to reproduction

The toxic to reproduction of a mixture according to the GHS.

Category 1B (May damage fertility or the unborn child.)

- Obtain special instructions before use.
- Do not handle until all safety precautions have been read and understood.
- · Use personal protective equipment as required.

Specific target organ system toxicity following single exposure

The specific target organ system toxicity following single exposure of a mixture according to the GHS. Category 1

Causes damage to organs....

[liver,kidney,respiratory organ,central nervous system]

- Do not breathe dust/fume/gas/mist/vapors/spray.
- Do not eat, drink or smoke when using this product.
- · Wash a hand after the handing.

Category 3

May cause respiratory irritation or May cause drowsiness or dizziness.

[respiratory tract,anesthesia]

- Do not breathe dust/fume/gas/mist/vapors/spray.
- · Use only outdoors or in a well-ventilated area.

Specific target organ system toxicity following repeated exposure

The specific target organ system toxicity following repeated exposure of a mixture according to the GHS.

Causes damage to organs...through prolonged or repeated exposure.

[nervous system, respiratory organ]

- Do not breathe dust/fume/gas/mist/vapors/spray.
- Do not eat, drink or smoke when using this product.
- · Wash a hand after the handing.

Category 2

May cause damage to organs...through prolonged or repeated exposure. [auditory organs]

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

Aspiration hazard

The aspiration hazard of a mixture according to the GHS.

Category - (Not classified.)

12 Ecological information

Aquatic toxicity (acute)

The aquatic toxicity of a mixture according to the GHS.

Category 1 (Very toxic to aquatic life.)

· Avoid release to the environment.

Aquatic toxicity (long-term)

The aquatic toxicity of a mixture according to the GHS.

Category 3 (Harmful to aquatic life with long lasting effects.)

· Avoid release to the environment.

Hazard to the ozone layer

Category - (Not classified.)

13 Disposal considerations;

The remainder waste

- · Container and apparatus wash water should not be discharged direct to the ground or to a drain ditch.
- · Wastes produced by effluent treatment or incineration should be disposed of in accordance with the related laws and regulations.
- · Diatomite etc. are made for them to adsorb the waste paint etc. when the incineration processing is done and it incinerates little by little in open type's incinerator.
- · If the incineration of waste, please use the incinerator with washing facilities.

Pollution container and packing

· The waste should be disposed of under a contract with an authorized industrial waste disposal company.

14 Transport information;

UN-number

1263

UN-proper shipping name PAINT or PAINT RELATED MATERIAL

UN-class

Class 3 (flammable liquid)

Packing group

Special safety measures

Common Following the description of the notes section on the handling and storage.

Be sure that there is no leakage in a container, make sure to prevent load shifting,

15 Regulatory information

Please manage based on the domestic legal system.

16 Other information

Main references cited

- Japanese Paint Manufacturers Association editing "Database for paint".
- Handbook of solvent.
- ACCIH: Threshhold Limit Values for Chemical substances and Physical Agents
- "Guidebook for SDS label making" which Japan Paint Manufacturers Association edited for GHS [For the mixture (for paint)] Revised second edition.
- NITE (product evaluation technology base mechanism) offer GHS classification result DB.

17 Notes

- The contents described in " Safety Data Sheet", but has been prepared on the basis of currently available materials, information, and data may be revised by amendment of the law and new knowledge.
- · When handling this product, please take security measures adapted to the reality and responsibility of the user in reference to the contents listed.
- This data sheet is no guarantee of safety and quality.

Issued 5-Jul-10 Amended 25-Apr-17 SDS No. 52050500100

Safety Data Sheet

1 Identification;

Product Name NX 505-001 Eggshell Gloss Makino Navy Blue

Product explanation type URETHANE COATING/BASE RESIN

Intended Use

Industrial coating for metal and plastics

Company name

Edogawagosei Co., Ltd.

Address

84-2 Singo Higashimatsuyama-shi Saitama, Japan

 Department in charge
 Technical division

 Phone
 81-493-26-0781

 Fax
 81-493-26-0786

Emergency number

81-493-26-0781

2 Hazard identification Symbols

Symbols





Signal word

DANGER

Hazard class(GHS chapter)

Flammable liquids

Acute toxicity Ora

Skin Inhalation/Gases Inhalation/Vapors

Inhalation/Vapors
Inhalation/Dust, Mist

Skin corrosion/irritation

Serious eye damage/eye irritation

Respiratory sensitization Skin sensitization Germ cell mutagenicity Carcinogenicity

Tavia to menual metian

Toxic to reproduction

Specific target organ system toxicity

single exposure

Specific target organ system toxicity

repeated exposure Aspiration hazard

Acute hazards to the aquatic environmer Long-term hazards to the aquatic environment

Hazard to the ozone layer

Category

Physical hazard statements

2 High flammable liquid and vapor

Not classified.Not classified.Not classified.

Not classified.Not classified.

Causes skin irritation.

2A Causes serious eye irritation.

Not classified.
 Not classified.
 Not classified.

2 Suspected of causing cancer.

1B May damage fertility or the unborn child.

1 Causes damage to organs....

[liver,kidney,respiratory organ,central nervous system]

1 Causes damage to organs...through prolonged or repeated exposure.
[nervous system,respiratory organ]

Not classified.

1 Very toxic to aquatic life.

3 Harmful to aquatic life with long lasting effects.

- Not classified.

3 Composition/information on ingredients;

Distinction of a single product-mixture: mixture

Ingredients	CAS No.	contents(%)	note
ethylbenzene	100-41-4	11.6%	
xylene	1330-20-7	11.6%	
Isobutyl acetate	110-19-0	6.5%	
n-butyl acetate	123-86-4	5.2%	
titanium dioxide	13463-67-7	5.0%	
carbon black	1333-86-4	1.2%	
C.I.Pigment Blue 15	147-14-8	0.7%	
stylene	100-42-5	0.2%	
1-methyl-2-pyrrolidone	872-50-4	0.2%	

4 First-aid measures:

IF IN EYES:

- Immediately rinse your eyes under clean running water for at least 15 minutes.
- · By lifting the upper and lower eyelids, make a complete cleaning of the eye.
- Remove contact lenses, if present and easy to do.
- Immediately call a POISON CENTER or doctor/physician if you feel unwell.

IF ON SKIN:

- · Immediately wipe the product off your skin with a cloth.
- · Wash away the matter thoroughly with water and soap or a with skin cleaning detergent.
- If the contacted skin changes in appearance or gives you pain, consult a doctor.

IF INHALED:

- If a vapor or gas is inhaled in large amounts, immediately move to a clean place for a breath of fresh air and take a rest, keeping yourself warm.
- Care should be taken so that anything thrown up may not be swallowed.
- · In case of suffocation, artificial respiration should be practiced.
- To perform (CPR) cardiopulmonary resuscitation if necessary.
- SDS and labels are shown in the physician, to receive the diagnosis.

IF SWALLOWED

- Immediately call a POISON CENTER or doctor/physician.
- · When a patient vomits, don't swallow vomit. Lie face-down or on the left side and secure an airway.

5	Fire-	fighting	measures:
v	1 11 6	HENLINE	IIIcasurcs.

Suitable extinguishing media						
Water [—] Carbon dioxide [O]	Form [0]	Dry chemical	[0]	Dry sand	[0]
Specific hazards arising from the chemical						
May product harmful fumes if burning.						
Specific protective actions for fire-fighters						

- Wear appropriate protectors (such as heat-resistant clothes).
- · Move any combustible materials away from the fire.
- · Keep an appropriate fire extinguisher at the ready to guard against ignition.
- · Do not over water.

6 Accidental release measures;

Personal precautions, protective equipment and emergency procedures

- Wear protective gloves/eye protection/face protection.
- · When the leakage is made to leave plenty personnel from the area, moving to windward.

Environmental precautions

- Prevent the inflow rivers, such as water pipes to any available means, you do not want to cause damage to the environment.
- If the cause pollution in rivers and water pipes etc., please contact the relevant organizations.

Methods and materials for containment and cleaning up

- · Remove any nearby ignition or heat sources and combustible materials.
- · Keep an appropriate fire extinguisher at the ready to guard against ignition.
- The outflow of mass enclosed in the embankment to prevent leakage.
- For recovery, use tools made of materials such as would not produce sparks on impact or due to static electricity.
- · Put the leakage into an gastight container and move it to a safe place.
- · Dispose of any adhered substance and wastes in accordance with the related laws and regulations.

7 Handling and storage;

Precautions for safe handling

- · Handle the product in a well-ventilated place.
- · Completely seal the container after closing it.
- · Do not use any heat sources or spark-producing devices nearby.
- To guard against static electricity, short the equipment to ground and use only explosion proof (increased safety type) electric apparatus.
- Immerse the used rags and spray cans sin water until they are disposed of.
- It touches the skin, the mucous membrane or clothes, and so as not to catch one's eye, the protective equipment is worn.
- After handling, neither the hand nor the face, etc. wash well, and bring the pollution protection tool such as gloves in to the rest room etc.
- When handling the product in an enclosed space, furnish an appropriate local exhauster and wear an appropriate protectors.
- · Do not eat, drink or smoke when using this product.

Conditions for safe storage, including any incompatibility

- · Mixed with an oxidizing agent storage is prohibited.
- · Protect from sunlight. Keep cool.
- · Store in a closed container.
- · Keep away from heat.

8 Exposure controls/personal protection

The second secon	404111-000	100000	
Exposure	limit	110	1100

Chemical name	CAS No.	contents(%)	ACGIH2002 TWA	
ethylbenzene	100-41-4	11.6%	20 ppm	
xylene	1330-20-7	11.6%	100 ppm	
Isobutyl acetate	110-19-0	6.5%	_	
n-butyl acetate	123-86-4	5.2%	=	
titanium dioxide	13463-67-7	5.0%	-	
carbon black	1333-86-4	1.2%	3.5 mg/m3	
C.I.Pigment Blue 15	147-14-8	0.7%	-	
stylene	100-42-5	0.2%	20 ppm	
1-methyl-2-pyrrolidone	872-50-4	0.2%	1 ppm	

Facility and equipment measures

- Use equipment of the explosion proof type.
- Equipment to seal the source of the steam, or providing a local exhaust ventilation.
- · Safety shower, restroom, providing a place near an eyewash facility handling.
- · Steam to prevent the retention device is installed exhaust

Personal protective equipment

- · In case of insufficient ventilation, wear suitable respiratory equipment.
- Wear protective gloves/protective clothing/eye protection.
- · For electrostatic coating, wear current-carrying shoes.
- Do not eat, drink or smoke when using this product.

9 Physical and chemical properties;

Appearance	:	Liquid		Color	:	Blu	е
Odor		Solvent odor		На	1		
Melting point	:	-	°C	Freezing point		_	°C
Initial boiling point		118.0	°C	Flash point	1	22.0	°C
Auto-ignition point	:	344.0	°C	Density		_	
Explosive limit (upper)	3	15.0	%	Explosive limit (lower)	1	1,1	%
Vapor pressure		3800(20°C)	Pa	Solubility		Insolubl	е
Partition coefficient:n-octanol/water	:	\ =		Viscosity	:	-	mm²/s

10 Stability and reactivity;

Chemical stability

- · Reactions at high temperatures
- · Cause reaction on contact with acids, alkali

Conditions to avoid

· Heating or contact with incompatible materials

Incompatible materials

· Strong oxidizing agents, amines

Hazardous decomposition products

· Harmful gas is generated

11 Toxicological information

Acute toxicity

The acute toxicity of a mixture according to the GHS.

Category - (Not classified.)

Skin

Oral

The acute toxicity of a mixture according to the GHS.

Category - (Not classified.)

Inhalation(vapor The acute toxicity of a mixture according to the GHS.

Category - (Not classified.)

Inhalation(gas) The acute toxicity of a mixture according to the GHS.

Category - (Not classified.)

Inhalation(mist) The acute toxicity of a mixture according to the GHS.

Category - (Not classified.)

Skin corrosion/irritation

Wear protective gloves.

To inspect the skin prior to use, keep all wounds properly protected.

The skin corrosion or irritation of a mixture according to the GHS.

Category 2 (Causes skin irritation.)

- Wash…thoroughly after handing.
- Wear protective gloves.

Serious eye damage/irritation

The serious eye damage and irritation of a mixture according to the GHS.

Category 2A (Causes serious eye irritation.)

- Wear protective eye protection/face protection.

Respiratory/Skin sensitizer

The respiratory and skin sensitizer of a mixture according to the GHS.

Category - (Not classified.)

Germ cell mutagenicity

The germ cell mutagenicity of a mixture according to the GHS.

Category - (Not classified.)

Carcinogenicity

The carcinogenicity of a mixture according to the GHS.

Category 2

- · Obtain special instructions before use.
- Do not handle until all safety precautions have been read and understood.
- Use personal protective equipment as required.

Toxic to reproduction

The toxic to reproduction of a mixture according to the GHS.

- Category 1B (May damage fertility or the unborn child.)
- Obtain special instructions before use.
- · Do not handle until all safety precautions have been read and understood.
- · Use personal protective equipment as required.

Specific target organ system toxicity following single exposure

The specific target organ system toxicity following single exposure of a mixture according to the GHS.

Causes damage to organs....

[liver,kidney,respiratory organ,central nervous system]

- Do not breathe dust/fume/gas/mist/vapors/spray.
- Do not eat, drink or smoke when using this product.
- · Wash a hand after the handing.

Category 3

May cause respiratory irritation or May cause drowsiness or dizziness. [anesthesia]

- Do not breathe dust/fume/gas/mist/vapors/spray.
- · Use only outdoors or in a well-ventilated area.

Specific target organ system toxicity following repeated exposure

The specific target organ system toxicity following repeated exposure of a mixture according to the GHS. Category 1

Causes damage to organs...through prolonged or repeated exposure.

[nervous system, respiratory organ]

- Do not breathe dust/fume/gas/mist/vapors/spray.
- Do not eat, drink or smoke when using this product.
- Wash a hand after the handing.

Category 2

May cause damage to organs…through prolonged or repeated exposure. [auditory organs]

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

Aspiration hazard

The aspiration hazard of a mixture according to the GHS.

Category - (Not classified.)

12 Ecological information

Aquatic toxicity (acute)

The aquatic toxicity of a mixture according to the GHS.

Category 1 (Very toxic to aquatic life.)

· Avoid release to the environment.

Aquatic toxicity (long-term)

The aquatic toxicity of a mixture according to the GHS.

Category 3 (Harmful to aquatic life with long lasting effects.)

· Avoid release to the environment.

Hazard to the ozone layer

Category - (Not classified.)

13 Disposal considerations;

The remainder waste

- · Container and apparatus wash water should not be discharged direct to the ground or to a drain ditch.
- · Wastes produced by effluent treatment or incineration should be disposed of in accordance with the related laws and regulations.
- · Diatomite etc. are made for them to adsorb the waste paint etc. when the incineration processing is done and it incinerates little by little in open type's incinerator.
- · If the incineration of waste, please use the incinerator with washing facilities.

Pollution container and packing

The waste should be disposed of under a contract with an authorized industrial waste disposal company.

14 Transport information;

UN-number

1263

UN-proper shipping name PAINT or PAINT RELATED MATERIAL

UN-class

Class 3 (flammable liquid)

Packing group

Special safety measures

Common Following the description of the notes section on the handling and storage.

Be sure that there is no leakage in a container, make sure to prevent load shifting.

15 Regulatory information

· Please manage based on the domestic legal system.

16 Other information

Main references cited

- Japanese Paint Manufacturers Association editing "Database for paint".
- · Handbook of solvent.
- · ACCIH: Threshhold Limit Values for Chemical substances and Physical Agents
- " "Guidebook for SDS label making" which Japan Paint Manufacturers Association edited for GHS [For the mixture (for paint)] Revised second edition.
- NITE (product evaluation technology base mechanism) offer GHS classification result DB.

17 Notes

- · The contents described in "Safety Data Sheet", but has been prepared on the basis of currently available materials, information, and data may be revised by amendment of the law and new knowledge.
- · When handling this product, please take security measures adapted to the reality and responsibility of the user in reference to the contents listed.
- · This data sheet is no guarantee of safety and quality.

Issued Amended SDS No.

5-Jul-10 18-Jan-17 52050900100

Safety Data Sheet

1 Identification;

Product Name NX 509-001 Eggshell Gloss Makino Snow White

Product explanation type

URETHANE COATING/BASE RESIN

Intended Use

Industrial coating for metal and plastics

Company name

Edogawagosei Co., Ltd.

Address

84-2 Singo Higashimatsuyama-shi Saitama, Japan

Department in charge Phone

Technical division 81-493-26-0781

Fax

81-493-26-0786

Emergency number

81-493-26-0781

2 Hazard identification

Symbols



Signal word

DANGER





Hazard class(GHS chapter)

Physical hazard statements

Flammable liquids

Acute toxicity Oral

Skin

Inhalation/Gases Inhalation/Vapors

Inhalation/Dust, Mist

Skin corrosion/irritation

Serious eye damage/eye irritation

Respiratory sensitization Skin sensitization Germ cell mutagenicity Carcinogenicity

Toxic to reproduction

Specific target organ system toxicity

single exposure

Specific target organ system toxicity

repeated exposure Aspiration hazard

Acute hazards to the aquatic environmer Long-term hazards to the aquatic environment

Hazard to the ozone layer

Category

2 High flammable liquid and vapor

Not classified.

Not classified. Not classified.

Not classified.

Not classified.

2 Causes skin irritation.

2A Causes serious eye irritation.

Not classified.

Not classified.

Not classified.

2 Suspected of causing cancer.

1B May damage fertility or the unborn child.

Causes damage to organs....

[liver,kidney,respiratory organ,central nervous system]

1 Causes damage to organs...through prolonged or repeated exposure.

[nervous system,respiratory organ]

Not classified.

Very toxic to aquatic life.

3 Harmful to aquatic life with long lasting effects.

Not classified.

3 Composition/information on ingredients;

Distinction of a single product-mixture: mixture

Ingredients	CAS No.	contents(%)	note
titanium dioxide	13463-67-7		
ethylbenzene	100-41-4	10.6%	
xylene	1330-20-7	10.6%	
Isobutyl acetate	110-19-0	6.7%	
n-butyl acetate	123-86-4	4.0%	
stylene	100-42-5	0.2%	

4 First-aid measures:

IF IN EYES:

- Immediately rinse your eyes under clean running water for at least 15 minutes.
- · By lifting the upper and lower eyelids, make a complete cleaning of the eye.
- · Remove contact lenses, if present and easy to do.
- · Immediately call a POISON CENTER or doctor/physician if you feel unwell.

IF ON SKIN:

- · Immediately wipe the product off your skin with a cloth.
- · Wash away the matter thoroughly with water and soap or a with skin cleaning detergent.
- If the contacted skin changes in appearance or gives you pain, consult a doctor.

IF INHALED:

- If a vapor or gas is inhaled in large amounts, immediately move to a clean place for a breath of fresh air and take a rest, keeping yourself warm.
- · Care should be taken so that anything thrown up may not be swallowed.
- In case of suffocation, artificial respiration should be practiced.
- To perform (CPR) cardiopulmonary resuscitation if necessary.
- · SDS and labels are shown in the physician, to receive the diagnosis.

IF SWALLOWED

- Immediately call a POISON CENTER or doctor/physician.
- · When a patient vomits,don't swallow vomit.Lie face-down or on the left side and secure an airway.

5	Fire-	-fighting	g measures;
•			5 11104041001

Suitable extinguishing media						
Water [—] Carbon dioxide [O]	Form	[0]	Dry chemical	[0]	Dry sand	[0]
Specific hazards arising from the chemical						
May product harmful fumes if burning.						
Specific protective actions for fire-fighters						

- · Wear appropriate protectors (such as heat-resistant clothes).
- · Move any combustible materials away from the fire.
- · Keep an appropriate fire extinguisher at the ready to guard against ignition.
- · Do not over water.

6 Accidental release measures;

Personal precautions, protective equipment and emergency procedures

- Wear protective gloves/eye protection/face protection.
- · When the leakage is made to leave plenty personnel from the area, moving to windward.

Environmental precautions

- Prevent the inflow rivers, such as water pipes to any available means, you do not want to cause damage to the environment.
- · If the cause pollution in rivers and water pipes etc., please contact the relevant organizations.

Methods and materials for containment and cleaning up

- Remove any nearby ignition or heat sources and combustible materials.
- · Keep an appropriate fire extinguisher at the ready to guard against ignition.
- The outflow of mass enclosed in the embankment to prevent leakage.
- For recovery, use tools made of materials such as would not produce sparks on impact or due to static electricity.
- · Put the leakage into an gastight container and move it to a safe place.
- Dispose of any adhered substance and wastes in accordance with the related laws and regulations.

7 Handling and storage;

Precautions for safe handling

- Handle the product in a well-ventilated place.
- · Completely seal the container after closing it.
- Do not use any heat sources or spark-producing devices nearby.
- To guard against static electricity, short the equipment to ground and use only explosion proof (increased safety type) electric apparatus.
- · Immerse the used rags and spray cans sin water until they are disposed of.
- It touches the skin, the mucous membrane or clothes, and so as not to catch one's eye, the
 protective equipment is worn.
- After handling, neither the hand nor the face, etc. wash well, and bring the pollution protection tool such as gloves in to the rest room etc.
- When handling the product in an enclosed space, furnish an appropriate local exhauster and wear an appropriate protectors.
- · Do not eat, drink or smoke when using this product.

Conditions for safe storage, including any incompatibility

- Mixed with an oxidizing agent storage is prohibited.
- · Protect from sunlight. Keep cool.
- · Store in a closed container.
- · Keep away from heat.

8 Exposure controls/personal protection

Exposure limit values

Chemical name	CAS No.	contents(%)	ACGIH2002 TWA	
titanium dioxide	13463-67-7	19.1%	_	
ethylbenzene	100-41-4	10.6%	20 ppm	
xylene	1330-20-7	10.6%	100 ppm	
sobutyl acetate	110-19-0	6.7%		
n-butyl acetate	123-86-4	4.0%	-	
stylene	100-42-5	0.2%	20 ppm	

Facility and equipment measures

- · Use equipment of the explosion proof type.
- Equipment to seal the source of the steam, or providing a local exhaust ventilation.
- Safety shower, restroom, providing a place near an evewash facility handling.
- Steam to prevent the retention device is installed exhaust

Personal protective equipment

- · In case of insufficient ventilation, wear suitable respiratory equipment.
- Wear protective gloves/protective clothing/eye protection.
- · For electrostatic coating, wear current-carrying shoes.
- · Do not eat, drink or smoke when using this product.

9 Physical and chemical properties;

Appearance : Odor :		Liquid		Color		White	е
		: Solvent odor		РН			
Melting point	-:-	_	°C	Freezing point	1 : 1	5.—:	°C
Initial boiling point	1	118.0	°C	Flash point		22.0	°C
Auto-ignition point	3	344.0	°C	Density		1.30	
Explosive limit (upper)	1	15.0	%	Explosive limit (lower)		1.1	%
Vapor pressure		3800(20°C)	Pa	Solubility		Insoluble	1
Partition coefficient:n-octanol/water				Viscosity	1	1-1	mm²/s

10 Stability and reactivity;

Chemical stability

- · Reactions at high temperatures
- · Cause reaction on contact with acids, alkali

Conditions to avoid

· Heating or contact with incompatible materials

Incompatible materials

Strong oxidizing agents, amines

Hazardous decomposition products

· Harmful gas is generated

11 Toxicological information

Acute toxicity

Oral The acute toxicity of a mixture according to the GHS.

Category - (Not classified.)

Skin The acute toxicity of a mixture according to the GHS.

Category - (Not classified.)

Inhalation(vapor The acute toxicity of a mixture according to the GHS.

Category - (Not classified.)

Inhalation(gas) The acute toxicity of a mixture according to the GHS.

Category - (Not classified.)

Inhalation(mist) The acute toxicity of a mixture according to the GHS.

Category - (Not classified.)

Skin corrosion/irritation

Wear protective gloves.

To inspect the skin prior to use, keep all wounds properly protected.

The skin corrosion or irritation of a mixture according to the GHS.

Category 2 (Causes skin irritation.)

- · Wash…thoroughly after handing.
- · Wear protective gloves.

Serious eye damage/irritation

The serious eye damage and irritation of a mixture according to the GHS.

Category 2A (Causes serious eye irritation.)

· Wear protective eye protection/face protection.

Respiratory/Skin sensitizer

The respiratory and skin sensitizer of a mixture according to the GHS.

Category - (Not classified.)

Germ cell mutagenicity

The germ cell mutagenicity of a mixture according to the GHS.

Category - (Not classified.)

Carcinogenicity

The carcinogenicity of a mixture according to the GHS.

Category 2 -

- · Obtain special instructions before use.
- · Do not handle until all safety precautions have been read and understood.
- · Use personal protective equipment as required.

Toxic to reproduction

The toxic to reproduction of a mixture according to the GHS.

Category 1B (May damage fertility or the unborn child.)

- Obtain special instructions before use.
- Do not handle until all safety precautions have been read and understood.
- · Use personal protective equipment as required.

Specific target organ system toxicity following single exposure

The specific target organ system toxicity following single exposure of a mixture according to the GHS. Category 1

Causes damage to organs....

[liver,kidney,respiratory organ,central nervous system]

- Do not breathe dust/fume/gas/mist/vapors/spray.
- Do not eat, drink or smoke when using this product.
- · Wash a hand after the handing.

Category 3

May cause respiratory irritation or May cause drowsiness or dizziness. [anesthesia]

- Do not breathe dust/fume/gas/mist/vapors/spray.
- · Use only outdoors or in a well-ventilated area.

Specific target organ system toxicity following repeated exposure

The specific target organ system toxicity following repeated exposure of a mixture according to the GHS. Category 1

Causes damage to organs...through prolonged or repeated exposure.

[nervous system, respiratory organ]

- Do not breathe dust/fume/gas/mist/vapors/spray.
- · Do not eat, drink or smoke when using this product.
- · Wash a hand after the handing.

Category 2

May cause damage to organs...through prolonged or repeated exposure. [auditory organs]

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

Aspiration hazard

The aspiration hazard of a mixture according to the GHS. Category - (Not classified.)

12 Ecological information

Aquatic toxicity (acute)

The aquatic toxicity of a mixture according to the GHS.

Category 1 (Very toxic to aquatic life.)

· Avoid release to the environment.

Aquatic toxicity (long-term)

The aquatic toxicity of a mixture according to the GHS.

Category 3 (Harmful to aquatic life with long lasting effects.)

- Avoid release to the environment.

Hazard to the ozone layer

Category - (Not classified.)

13 Disposal considerations;

The remainder waste

- · Container and apparatus wash water should not be discharged direct to the ground or to a drain ditch.
- · Wastes produced by effluent treatment or incineration should be disposed of in accordance with the related laws and regulations.
- · Diatomite etc. are made for them to adsorb the waste paint etc. when the incineration processing is done and it incinerates little by little in open type's incinerator.
- If the incineration of waste, please use the incinerator with washing facilities.

Pollution container and packing

· The waste should be disposed of under a contract with an authorized industrial waste disposal company.

14 Transport information;

UN-number

1263

UN-proper shipping name PAINT or PAINT RELATED MATERIAL

UN-class

Class 3 (flammable liquid)

Packing group

Special safety measures

Common Following the description of the notes section on the handling and storage.

Be sure that there is no leakage in a container, make sure to prevent load shifting.

15 Regulatory information

· Please manage based on the domestic legal system.

16 Other information

Main references cited

- Japanese Paint Manufacturers Association editing "Database for paint".
- Handbook of solvent.
- · ACCIH: Threshhold Limit Values for Chemical substances and Physical Agents
- "Guidebook for SDS label making" which Japan Paint Manufacturers Association edited for GHS [For the mixture (for paint)] Revised second edition.
- · NITE (product evaluation technology base mechanism) offer GHS classification result DB.

17 Notes

- The contents described in "Safety Data Sheet", but has been prepared on the basis of currently available materials, information, and data may be revised by amendment of the law and new knowledge,
- · When handling this product, please take security measures adapted to the reality and responsibility of the user in reference to the contents listed.
- · This data sheet is no guarantee of safety and quality.