

SAFETY DATA SHEET

Product number : 011-0016

1 . PRODUCT AND COMPANY IDENTIFICATION

Product name : LACQUER SPRAY-SL CLEAR
Kinds of product : Nitro cellulose lacquer (AEROSOL SPRAY PAINT)
Manufacturer :
Company name : SUNDAY PAINT Co., Ltd
Address : 6-1-124 Nishi Kujou, Konohana- ku, Osaka 554-0012
Charge section : Mayor of customer service
Phone number : 06-6466-6700
Fax number : 06-6466-2751
Product use : For rolling stock
Date of issue : May 15, 2004
Date of prepared : September 25, 2014

2 . HAZARDS IDENTIFICATION

GHS classification

Physicochemical danger

Explosives : No classification
Flammable gases : Out of classification
Flammable aerosols : Category 2
Oxidizing gases : Out of classification
Gases under pressure : Out of classification
Flammable liquids : Category 2
Flammable solids : Out of classification
Self-reactive substances and mixtures : No classification
Prophetic liquids : No classification
Prophetic solids : Out of classification
Self-heating substances and mixtures : No classification
Substances and mixtures which, in contact with water, emit flammable gases : No classification
Oxidizing liquids : No classification
Oxidizing solids : Out of classification
Organic peroxides : No classification
Corrosive to metals : No classification

Hazardous property for the health

Acute toxicity - oral : Out of category
Acute toxicity - dermal : Out of category
Acute toxicity - inhalation / gas : Out of classification
Acute toxicity-inhalation/vapour : Category 4
Acute toxicity-inhalation/dusts and mists : Category 4
Skin corrosion / irritation : Category 3
Serious eye damage /irritation : Category 2
Respiratory sensitization : Out of category
Skin sensitization : Out of category
Germ cell mutagenicity : Out of category
Carcinogenicity : Out of category
Reproductive toxicity : Category 2
Specific target organ systemic toxicity (single exposure) : Category 1
(Kidney , Systemic toxicity ,
Central nervous system)
Category 2
(Lungs)
Category 3
(Respiratory tract irritation)
Specific target organ systemic toxicity (repeated exposure) : Category 1

(Systemic toxicity)
Category 2
(Liver , Blood vessel , Pancreas)

Aspiration toxicity : Out of category

Environmental hazard

Hazardous to the aquatic environment (acute toxicity) : Category 3

Hazardous to the aquatic environment chronic hazard : Out of category

GHS label elements

Picture indication or a symbol



Signal word

Danger

Hazard statement

The combustibility and flammable aerosol.
Highly flammable liquid and vapour.
Harmful if inhaled.
May cause organic solvent poisoning.
Slight skin irritation.
Causee serious eye irritation.
Suspected of damaging fertility or the unborn child.
Causes damage to organs Kidney , Systemic toxicity , Central nervous system.
May cause respiratory irritation
Causes damage to organs Systemic toxicity through prolonged or repeated exposure.
May causes damage to organs Liver , Blood vessel , Pancreas through prolonged or repeated exposure.
Harmful to aquatic life.

Precautionary statements

Prevention

Keep away from heat/sparks/open flames/hotsurfaces. - No smoking.
Ground/bond container and receiving equipment - if the explosive is electrostatically sensitive.
Use explosion-proof electrical/ventilating/lighting Equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Wear protection gloves, protection glasses, protection side, protection clothes.
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Do not breathe dust/fume/gas/mist/vapours/spray.
Wash hands thoroughly after handling.
Do not eat, drink or smoke when using this product.
Use only outdoors or in a well-ventilated area.
Avoid release to the environment - if this is not the intended use.
Keep container tightly closed.

Response

If on skin (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.
In case of fire, use Carbon dioxide gas, foam, dry powder.
If exposing it: Contact the doctor.
If exposed: Call a POISON CENTER or doctor/physician.
If inhaled: Remove to fresh air and keep at rest in a position comfortable for breathing.
Call a poison center/doctor/physician if you feel unwell.
Get medical attention/advice if you feel unwell.
If Inhaled: Call a POISON CENTER or doctor/physician if you feel unwell.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
Continue rinsing.
If eye irritation persists, get medical advice/attention.

Storage

Store in cool/well-ventilated place.
Store locked up.

Store container tightly closed in well-ventilated place - if product is as volatile as to generate hazardous

Disposal

Dispose of contents/container to accordance with local/regional/national/international regulation.

3 . COMPOSITION / INFORMATION ON INGREDIENTS

Substance/mixture : A mixture.
Chemical name / generic name : No information.
Chemical characteristic (chemical formulas) : No information.
Poisonous and Deleterious Substances Control Law : No correspond.
Ingredient :

Ingredient name	CAS no	%	ISHL (JPN) chemicals requiring listed-ification	Poisonous (JPN)che and Deleterious Substances- ENCS (JPN)	Pollutant Release and Transfer Registers (PRTR)
n-butyl acetate	123-86-4	20.0 ~ 30.0		—	
methyl isobutyl ketone	108-10-1	1.0 ~ 10.0		—	
cellulose nitrate	9004-70-0	1.0 ~ 10.0		—	
isopropyl alcohol	67-63-0	1.0 ~ 10.0		—	
isobutanol	78-83-1	1.0 ~ 10.0		—	
dimethyl ether	115-10-6	40.0 ~ 50.0		—	

4 . FIRST AID MEASURES

Inhalation

If inhaled vapour or gases and felt unwell, remove to fresh air and keep at rest in a position comfortable for breathing. And call a doctor /physician if feels unwell.
If inhaled vapour or gases in large quantities, remove to fresh air and rest with keeping warm.
And if breathing gets irregular or stops, perform article respiration. And do not let swallow vomit.
Consult a doctor/ physician immediately.

Skin contact

Wipe off clinging substace with clean cloth quickly.
Wash off thoroughly with plenty of water and soap. Do not use solvent or paint thinner.
If any change of appearance is seen, or pain persists and feels unwell, cosult a doctor/physician.
Take off all contaminated clothing. Immediately.

Eye contact

Wash off with plenty of clean water immediately for 15minutes or more. And remove contact lens ,if presence and easy
And completely wash it including the underside of eyelid.
Consult a physician as soon as possible.
Call a POISON CENTER or doctor/physician immediately.

Ingestion

If swallowed accidentally, rest and consult a doctor/physician immediately.
Do not let swallow vomit.
Avoid forcing to vomit without physician's instraction.

The protection of the person taking first aid mesure

Wear proper protectors (safety goggles, respirator, gloves,etc.)
Ventilate

5 . FIRE-FIGHTING MEASURES

Extinguishing media : Carbon dioxide gas,foam, dry powder
Must not use extinguishing media : Water (stick water, high pressure water jet)
Special fire extinguishing method(protection of fire-fighting person)
Wear proper protectors (heat-resistant clothes,etc.)
Remove flammable matters immediately.
Use designated extinguishant.
If sealed container is exposed to high temperature, water to cool.
Fire-Fight from windward.

6 . ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Wear proper protectors (safety goggles,respirator,gloves,apron,etc.)
Declare off-limits of the outskirts and I do not bring it close anyone other than the person concerned

and prevent a second disaster.

Remove ignition source, heat source and flammable matters immediately.

Prepare proper extinguisher for accidental fire.

Environmental precautions

Take cautions not to cause influence on environment by discharge to river.

Methods and materials for containment and cleaning up

Dispose of waste or clinging matter according to related regulation.

Recollect leakage in the container can be sealed and keep in safety place.

Recollect with tool of non-spark material.

Recollect with dry sand, soil, or other nonflammable matter. If in large quantity, prevent from flowing out by banking.

7 . HANDLING AND STORAGE

Handling

Handling technical measures

Handle in good ventilated area.

Close container tightly with closer after use.

Take away from open flame, spark, heat-source.

Use a non-spark type hand tool.

While working, wear antistatic working suits and shoes.

Wear proper protectors to prevent from contact on skin, mucous membrane, wearing clothes and eyes.

Wash hands and face well after handling, and avoid to bring polluted protectors in any place where person stays.

In closed place, ensure good local exhaust ventilation and wear proper protectors.

Handling instructions

As a measure against static electricity accident, ground equipment and use electric appliances of explosion proof type.

A material product that contains Class 2 Organic Solvents on exceeding 5% is obligated to be stored in a closed equipment or in local exhaust ventilation equipment.

Storage

Avoid a direct sunlight.

Keep in good ventilated place.

Keep away from open flame and heat source.

8 . EXPOSURE CONTROLS / PERSONAL PROTECTION

Taking measures for equipments:

Use explosion proof type equipment.

Install ventilation equipment to prevent concentrating of vapour.

Ground equipment for transferring, pumping and stirring of fluid.

the devices such as the churning.

Provide equipment devised so that heat or ignition source can not be placed in the neighborhood of handling place.

In door application, use either not to expose the operator directly, such as using automatic

painting machinees, or that keeps the operator from exposure, such as local exhaust ventilation equipment.

In application in closed space such as inside of tank, install equipment that can ventilate completely even its bottom.

Consider so that the operator can not touch or expose to corrosive substance directly.

Management density / permission density

Chemical substance name	Exposure limits-ppm	Exposure limits-mg/m3	skin
n-butyl acetate	150	—	—
methyl isobutyl ketone	20	—	—
isopropyl alcohol	200	—	—
isobutanol	50	—	—

Chemical substance name	Japan Society for Occupational Health (JSOH) - ppm	Japan Society for Occupational Health (JSOH) -mg/m3	skin
methyl isobutyl ketone	50	200	—

Chemical substance name	ACGIH_TWA - ppm	ACGIH_TWA -mg/m3	skin
n-butyl acetate	150	—	—
methyl isobutyl ketone	20	—	—
isopropyl alcohol	200	—	—
isobutanol	50	—	—

Chemical substance name	ΔACGIH STEI - ppm	ΔACGIH STEI -mg/m3	skin
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Chemical substance name	ACGIH STEEL - ppm	ACGIH STEEL - mg/m3	SKH
methyl isobutyl ketone	75	—	—
Chemical substance name	IARC		
methyl isobutyl ketone	2B		
isopropyl alcohol	3		
Tool for protection			
Respiratory protective equipment			
Wear a gas mask for organic gases.			
Wear a mask with supplying air in closed place.			
Hand protective equipment			
Wear the glove that organic solvents or chemicals can not permeate through.			
Eyes protective equipment			
Wear protective eyeglasses or goggles.			
Skin and body protective equipment			
Wear suitable clothing that should be impervious to chemicals and to avoid direct contact of skin in handling.			
Other information			
Wear electricity shoes on electrostatic painting.			

9 . PHYSICAL AND CHEMICAL PROPERTIES

	[Propellant]	[Paint]
Appearance		
Physical state	: Gas	Liquid
Color	: No information.	No information.
Odor	: No information.	Solvents Smell
Ph	: No information.	No information.
Melting point/freezing point	: No information.	No information.
Initial boiling point and boiling	: -24.8	117 ~ 118
Flash point	: -41.4	21.5
Auto-ignition temperature(ignition point)	: 350	180
Flammability (solid, gas)	: No information.	No information.
Upper/lower flammability or explosive limits	: 27.0/3.4 vol %	8 / 1.2 vol %
Vapor pressure()	: 257230 (0)	2133 (Pa(25)
Vapor density	: No information.	No information.
Evaporation rate	: No information.	No information.
Specific gravity (relative density)	: 0.67	0.95
Solubility		
Solubility for the water	: No information.	
Dissolubility for the water	: No information.	
Solubility for the solvent	: No information.	
Dissolubility for the solvent	: No information.	
Partition coefficient:n-octanol/water		
n-butyl acetate	: 1.78	
Decomposition temperature	: No information.	

10 . STABILITY AND REACTIVITY

Conditions to avoid
Avoid high temperature.
Avoid an impact./ Avoid a vibration.
Hazardous decomposition products
Hazardous gases such as low molecular weight monomers are emitted.
Hazardous gases such as carbon monoxide are emitted.
Other information on hazardousness
Inside pressure of a container is 4.5kg/cm3 (20)
High-pressure gas , and an inflammability
Anesthetic (very weak)
As touch the liquefied gas,there is a possibility of inflammation or frostbite.

11 . TOXICOLOGICAL INFORMATION

Acute toxicity

n-butyl acetate	: LD50(oral)	rat	=14130mg/kg
	LD50(dermal)	rabbit	>17600mg/kg
	LC50(vapour)	rat	2000ppm(4h)
	LC50(dust/mist)	rat	1.85mg/L(4h)
methyl isobutyl ketone	: LD50(oral)	—	=2919mg/kg
	LD50(dermal)	—	=3000mg/kg
	LC50(vapour)	—	=2000ppm (4h)
	LC50(dust/mist)	—	—
cellulose nitrate	: LD50(oral)	—	>5000mg/kg(4h)
	LD50(dermal)	—	—
	LC50(vapour)	—	—
	LC50(dust/mist)	—	—
isopropyl alcohol	: LD50(oral)	—	3437mg/kg (4h)
	LD50(dermal)	—	4059mg/kg (4h)
	LC50(vapour)	—	29512ppm (4h)
	LC50(dust/mist)	—	—
isobutanol	: LD50(oral)	—	2596mg/kg (4h)
	LD50(dermal)	—	2523mg/kg (4h)
	LC50(vapour)	—	6336ppm (4h)
	LC50(dust/mist)	—	—
dimethyl ether	: LD50(oral)	—	—
	LD50(dermal)	—	—
	LC50(vapour)	—	—
	LC50(dust/mist)	—	—

Skin corrosion/irritation

n-butyl acetate	: Category 3
isobutanol	: Category 2

Serious eye damage /irritation

n-butyl acetate	: Category 2B
isopropyl alcohol	: Category 2A
isobutanol	: Category 2A

Teratogenicity

isopropyl alcohol	: Category 2
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Specific target organ / systemic toxicity - single exposure

n-butyl acetate	: Category 1 (Central nervous system)
	Category 2 (Lungs)
	Category 3 (Narcotic effects)
methyl isobutyl ketone	: Category 3 (Respiratory tract irritation , Narcotic effects)
cellulose nitrate	: Category 3 (Respiratory tract irritation)
isopropyl alcohol	: Category 1 (Kidney , Systemic toxicity , Central nervous system)
	Category 3 (Respiratory tract irritation)
isobutanol	: Category 3 (Respiratory tract irritation , Narcotic effects)

Specific target organ / systemic toxicity - repeated exposure

methyl isobutyl ketone	: Category 1 (Systemic toxicity)
isopropyl alcohol	: Category 2 (Liver , blood vessel , Pancreas)

Aspiration hazard

methyl isobutyl ketone	: Category 2
isopropyl alcohol	: Category 2
isobutanol	: Category 2

1 2 . ECOLOGICAL INFORMATION

Take care for spills or waste in handling because of its environmental impact. Especially take care for product or rinsing water not to flow into ground, river and drain directly.

Hazardous to the aquatic environment - Acute hazard

n-butyl acetate	: Category 3
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1 3 . DISPOSAL CONSIDERATIONS

Residual waste

Let authorized industrial waste disposing agent to dispose of abolished paint, containers and others under agreement.
Dispose of abolished paint, materials and waste from incineration in accordance with regulation or laws of 'Specified Hazardous Industrial Wastes' of Special Controlled Industrial Waste.
Must not dispose of waste water from washing container, machinery and etc. into the ground or drain without treatment.
Dispose of waste from waste water treatment, incineration and etc. in accordance with regulation or laws relating to disposal and cleaning of waste, or let special disposing agent to dispose.
Incinerate abolished paint absorbed to diatomaceous earth by small quantity in the open-type incinerator. Or incinerate them by spraying in the fire box. If it is apprehended that hazardous gases such as dioxins are generated, let authorized industrial waste disposing agent to dispose under agreement."
Let authorized industrial waste disposing agent to dispose of abolished paint and materials under agreement, because there are specified as Special Controlled Industrial waste (waste oil).

Pollution container and packing:

Let authorized industrial waste disposing agent to dispose of them under agreement.
Dispose of used container after removing contents completely.

14 . TRANSPORT INFORMATION

After confirming the state of container had no leakage, and load to prevent collapsing, fall and damage.

Obey the description of 'Handling and Storage'

UN number : 1950

Land transportation

If falling under 'Fire Service Act', 'Industrial Safety and Health Act' or 'Poisonous and Deleterious Substances Control Act', obey the transport method regulated in each law.

Marine transportation

Obey the provisions of 'Ship Safety Act'

Air transport

Obey the provisions of 'Civil Aeronautics Act'

Indicator number : 126

IMQ class : 2.1 (Inflammable gas)

15 . REGULATORY INFORMATION

Fire and Disaster Management Act

Dangerous Materials Class 4 Group 1 Petroleum, Non-Solution, dangerous grades II.

Industrial Safety and Health Act

Table 1-4 by Act of Parliament, Flammable material

Article 57-2, notifiable substances

Ordinance on Prevention of Organic Solvent Poisoning, Class 2 Organic Solvents

High pressure gas control law

Liquefied gas, Flammable gas (except: aerosol)

Special Management Industrial Waste

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Pollutant Release and Transfer Register

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16 . OTHER INFORMATION

Literatures

"Raw Materials Database" edited by Japan Paint Manufacturers Association

Materials Safety Data Sheet Guide (Mixture)" edited by Japan Paint Manufacturers Association

"Solvent Pocket Book" Ohmsha, Ltd.

The Handbook for Precautions and First Aids to Dangerous Goods.

International Chemical Safety Cards.

Other information

This SDS is necessary to handle our manufacture property and gathered up the matter which must be paid attention briefly for normal handling.

However the content noted above is prepared based on information or data available at the present, the evaluation of hazardousness and harmfulness is not adequate necessary, so be careful in handling.

This SDS may be revised without notice by revising law or new knowledge.

This SDS is based on the standard of Japan Paint Manufacturers Association with Laws of Japan but not from local government, accord to relevant local laws as required when handling.