SAFETY DATA SHEET

Issuing Date 6/1/2015 Revision Date 6/1/2015 Revision Number 1

1. IDENTIFICATION

Product Identifier

Product Name NSC6002, NSC6035, NSC6005, NSC6003

Other means of identification

Synonyms

Recommended use of the chemical and restrictions on use

Recommended use Uses advised against

Details of the supplier of the safety data sheet

Supplier Name

Supplier Address

Yasutomo Inc.

1805 Rollins Road Burlingame, CA

Writing Instrument
No information available

94010

NONE

650 737 8888

yasutomo490@gmail.com

650 737 8888

Supplier Phone Number

Supplier Email

Emergency telephone number

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute Toxicity - Oral	Category 4
Serious eye damage/eye irritation	Category 1
Specific target organ toxicity (repeated exposure)	Category 2

GHS Label elements, including precautionary statements

Emergency Overview

Signal word Danger

Hazard Statements

Harmful if swallowed

Causes serious eye damage

May cause damage to organs through prolonged or repeated exposure







Appearance Multiple Colors

Physical State

Solid containing liquid / Solid

Odor

Characteristic

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

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

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

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Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention

Eyes

IF IN EYES: Rinse cautiously with water for several minuts. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

Ingestion

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth.

Precautionary Statements - Storage

None

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazard not otherwise classified (HNOC)

NA

Unknown Toxicity

8% of the mixture consists of ingredient(s) of unknown toxicity

Other information

Toxic to aquatic life with long lasting effects.

Interactions with Other Chemicals

Use of alcoholic beverages may enhance toxic effects.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%	Trade Secret
Ethylene Glycol	107-21-1	15-40%	*
Propylene Glycol monomethyl			
ether	107-98-2	3-7%	*
Methyl violet	8004-87-3	1-5%	*
Ethyl Alcohol	64-17-5	1-5%	*

^{*} The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

First aid measures

General Advice In case of rupture: Immediate medical attention is required. Show this safety data sheet to the doctor in

attendance.

Eye Contact Rinse thoroughly with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while

rinsing. Do not rub affected area. Seek immediate medical attention/advice.

Skin Contact

Wash off immediately with soap and plenty of water. Get medical attention if irritation develops and persists.

Inhalation Remove to fresh air. Get medical attention immediately if symptoms occur.

Ingestion Rinse mouth immediately and drink plenty of water. Never give anything by mouth to an unconscious person. Do

NOT induce vomiting. Call a physician.

Self-protection of the first aider

Avoid contact with skin, eyes or clothing. Use personal protective equipment as

required. Wear personal protective clothing (see section 8).

Most Important symptoms and effects, both acute and delayed

Most Important symptoms and effects Burning sensation

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Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment

Unsuitable extinguishing media

CAUTION: Use of water spray when fighting fire may be inefficient.

Specific Hazards Arising from the Chemical

No information available

Hazardous Combustion Products

Carbon oxides.

Explosion Data

Sensitivity to Mechanical Impact No.
Sensitivity to Static Discharge No.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing appartus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin, eyes and clothing. Use personal protective equipment as required. Ensure

adequate ventilation. Evacuate personnel to safe areas.

Other information Refer to protective measures listed in Sections 7 and 8

Environmental Precautions

Environmental Precautions Refer to protective measures listed in Sections 7 and 8. Prevent futher leakage or

spillage if safe to do so.

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Pick up and transfer to properly labeled containers. In case of rupture: Soak up with

inert absorbent material.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling In case of rupture: Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin,

eyes or clothing. Do not eat, drink or smoke when using this product.

Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry, cool and well-ventilated place. Keep out of reach of children.

Incompatible products Strong oxidizing agents. Strong acids. Strong bases.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Storage

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Ethylene glycol 107-21-1	Ceiling: 100 mg/m3 aerosol only	(vacated) Ceiling: 50 ppm (vacated) Ceiling: 125 mg/m3	
Propylene glycol monomethyl ether 107-98-2	STEL: 100 ppm TWA: 50 ppm	(vacated) TWA: 100 ppm (vacated) TWA: 360 mg/m3 (vacated) STEL: 150 ppm (vacated) STEL: 540 mg/m3	TWA: 100 ppm TWA: 360 mg/m3 STEL: 150 ppm STEL: 540 mg/m3
Ethyl Alcohol 64-17-5	STEL: 1000 ppm	TWA: 1000 ppm TWA: 1900 mg/m3 (vacated) TWA: 1000 ppm (vacated) TWA: 1900 mg/m3	IDLH: 3300 ppm 10% LEL TWA: 1000 ppm TWA: 1900 mg/m3

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ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits Immediately Dangerous to Life or Health

Other Exposure Guidelines

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d

962 (11th Cir., 1992) See section 15 for national exposure control parameters

Appropriate engineering controls

Engineering Measures Showers, Eyewash stations, Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/Face Protection None required for consumer use. If splashes are likely to occur: Wear safety glasses

with side shields (or goggles).

Skin and Body ProtectionNone required for consumer use. Repeated or prolonged contact: Wear protective

gloves and protective clothing.

Respiratory Protection

Hygiene Measures

No protective equipment is needed under normal use conditions. If exposure limites are exceeded or irritation is experienced, ventilation and evacuation may be required. Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Avoid contact with skin, eyes or clothing.

Wear suitable gloves and eye/face protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State Solid containing liquid, Solid

AppearanceMultiple ColorsOdorCharacteristic

olor No information available Odor Threshold No information available

<u>Property</u>	<u>Values</u>	Remarks Method
pH	No data available	None known
Melting/Freezing point	No data available	None known
Boiling point / boiling range	No data available	None known
Flash Point	No data available	None known
Evaporation Rate	No data available	None known
Fammability (solid, gas)	No data available	None known
Flammability Limit in Air		
Upper flammability limit	No data available	
Lower flammability limit	No data available	
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Specific Gravity	No data available	None known
Water Solubility	Soluble in water	None known
Solubility in other solvents	No data available	None known
Partition coefficient:	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known
Explosive properties	No data available	
Oxidizing Properties	No data available	
Other Information		
Softening Point	No data available	
VOC Content (%)	No data available	
Particle Size	No data available	
Particle Size Distribution		

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10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous Polymerization

Hazardous polymerization does not occur.

Conditions to avoid

None known based on information supplied.

Incompatible materials

Strong oxidizing agents. Strong acids. Strong bases.

Hazardous Decomposition Products

Carbon oxides.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information Product does not present an acute toxicity hazard based on known or supplied

information. In case of rupture:

Inhalation Specific test data for the substance or mixture is not available. May cause irritation of

respiratory tract.

Eye Contact Specific test data for the substance or mixture is not available. Severely irritating to

eyes. Causes serious eye damage. May cause burns. May cause irreversible damage to

eves.

Skin Contact Specific test data for the substance or mixture is not available. May cause irritation.

Prolonged contact may cause redness and irritation.

Ingestion Specific test data for the substance or mixture is not available. Ingestion may cause

irritation to mucous membranes. Ingestion may cause gastrointestinal irritation, nausea, vomiting, and diarrhea. May be harmful if swallowed. (based on components).

Component Information

Component information			
Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Ethylene glycol 107-21-1	> 3999 mg/kg (Rat)	-	-
Propylene glycol monomethyl ether 107-98-2	> 5199 mg/kg (Rat)	> 12.99 g/kg (Rabbit)	> 54.59 mg/L (Rat) 4h > 24 mg/L (Rat) 4 h
Ethyl Alcohol 64-17-5	-	-	> 124.69 mg/L (Rat) 4h

Information on toxicological effects

Symptoms Erythema (skin redness). May cause blindness. Burning.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

SensitizationNo information available.Mutagenic EffectsNo information available.

Carcinogenicity

The table below indicates whether each agency has listed any ingredient as a carcinogen. The listed substance(s) has been shown to be carcinogenic in long-term studies only when consumed orally. This is not a relevant route of exposure for this product.

Chemical Name	ACGIH	IARC	NTP	OSHA
Ethyl Alcohol	A3	Group 2B	Known	х
64-17-5				

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ACGIH (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

NTP (National Toxicology Program)

Known - Known Carcinogen

OSHA (Occupational Safety and Health Administration of the US Dept of Labor)

X - Present

Reproductive Toxicity STOT - single exposureNo information available
No information available

STOT - repeated exposure Causes damage to organs through prolonged or repeated exposure. Based on classification criteria from the 2012 OSHA

Hazard Communication Standard (29 CFR 1910.1200), this product has been determined to cause systemic target organ

toxicity from chronic or repeated exposure. (STOT RE).

Chronic Toxicity

No known effect based on information supplied. Contains a known or suspected carcinogen. Contains a known or

suspected reproductive toxin. The listed substance(s) has been shown to be carcinogenic and toxic to reproduction in long-term studies only when consumed orally. This is not a relevant route of exposure for this product.

Target Organ Effects Eyes. Blood. Central Nervous System (CNS). Liver. Reproductive System. Respiratory System. Skin. Heart. Kidney.

Aspiration Hazard No information available

Numerical measures of toxicity Product Information

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral) 1,450.00 mg/kg

ATEmix (inhalation-dust/mist)

808.70 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

The environmental impact of this product has not been fully investigated

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Ethylene glycol 107-21-1	96h EC50: 6500 - 13000 mg/L (Pseudokirchneriella subcapitata)	96h LC50: 41000 mg/L (Oncorhynchus mykiss) 96h LC50: 14-18 mL/L (Oncorhynchus mykiss) 96h LC50: 40761 mg/L (Oncorhynchus mykiss) 96h LC50: = 27540 mg/L (Lepomis macrochirus) 96h LC50: = 16000 mg/L (Poecilia reticulata) 96h LC50: 40000 - 60000 mg/L (Pimephales promelas)	EC50 > 10000 mg/L 16 h EC50: = 620 mg/L 30 min EC50: = 620.0 mg/L 30 min	48h EC50: = 46300 mg/L
Propylene glycol monomethyl ether 107-98-2		96h LC50: = 20.8 g/L (Pimephales promelas) 96h LC50: 4600 - 10000 mg/L (Leuciscus idus)		48h EC50: = 23300 mg/L

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Ethyl Alcohol	96h LC50: > 100 mg/L	EC50 > 34634 mg/L 30 min	48h LC50: 9268 - 14221 mg/L 48h
64-17-5	(Pimephales promelas)	EC50: = 35470 mg/L 5 min	EC50: = 2 mg/L 24h EC50: = 10800
	96h LC50: 13400 -		mg/L
	15100 mg/L (Pimephales		
	promelas) 96h		
	LC50: 12.0 - 16.0 mL/L		
	(Oncorhynchus mykiss)		

Persistance and Degradability

No information available.

Bioaccumulation

Chemical Name		Log Pow
Ethylene glycol	107-21-1	-1.93
Propylene glycol monomethyl ether 107-98-2		-0.437
Ethyl Alcohol	64-17-5	-0.32

Other adverse effects

No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal methods

This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

Contaminated Packaging

Dispose of contents/containers in accordance with local regulations.

This product contains one or more substances that are listed with the State of California as a hazardous waste

Chemical Name		California Hazardous Waste
Ethyl Alcohol	64-17-5	Toxic
		Ignitable

Ethyl Alcohol	64-17-5	Toxic Ignitable
		TRANSPORT INFORMATION

DOT Not Regulated Not Regulated <u>TDG</u> MEX Not Regulated <u>ICAO</u> Not Regulated <u>IATA</u> Not Regulated IMDG/IMO Not Regulated RID Not Regulated <u>ADR</u> Not Regulated <u>AND</u> Not Regulated

15. REGULATORY INFORMATION

International Inventories

Complies **TSCA**

All components are listed either on the DSL or NDSL DSL

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

US Federal Regulations

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SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	CAS No	Weight - %	SARA 313 - Threshold Values
Ethylene glycol	107-21-1	15-40%	1.0

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, contains one or more substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQ	RQ
Ethylene glycol	5000 lb		RQ 5000 lb final RQ
107-21-1			RQ 2270 kg final RQ

US State Regulations

U.S. State Right-to-Know Regulations

Chemical Name Ethylene glycol 107-21-1	New Jersey X	Massachusetts X	Pennsylvania X	Rhode Island X	Illinois X
Propylene glycol monomethyl ether 107-98-2	Х	Х	х		
Ethyl Alcohol 64-17-5		х			

International Regulations

Mexico

National Occupational exposure limits

Component	Carcinogen Status	Exposure Limits
Ethylene glycol 107-21-1		Mexico: Ceiling 100 mg/m3
Ethyl Alcohol 64-17-5		Mexico: TWA 1000 ppm Mexico: TWA - 1900 mg/m3

Mexico - Occupational Exposure Limits - Carcinogens

Canada

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WHMIS Hazard Class

Non-controlled

16. OTHER INFORMATION						
NFPA	Health Hazards	1	Flammability 0	Instability	0	Physical and
						Chemical Hazards -
HMIS	Health Hazards	1*	Flammability 0	Physical Hazard	0	Personal Protection
						X

Chronic Hazard Star Legend * = Chronic Health Hazard

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. 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. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

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