

SAFETY DATA SHEET

SDS: A1291-0100_E001

Date Prepared: 2017/10/18

Date Revised: 2023/01/10

Product Name: **NEWCOL 291-M**

1. Identification of the substance/mixture and of the company/undertaking

Product name:	NEWCOL 291-M
Identification of the supplier:	Nippon Nyukazai Co., Ltd.
Address:	No.4-1.Nihonbashi Kobuna-cho, Chuo-ku, Tokyo 103-0024, Japan
Charge section:	Business Operation Department (TEL:+81-3-5651-5640,FAX:+81-3-5651-5646)
Emergency telephone number:	Business Operation Department (TEL:+81-3-5651-5640,FAX:+81-3-5651-5646)
Recommend use:	Wetting/penetrating agent , Detergent , Emulsion polymerization agent
Restrictions on use:	Seek expert judgment when using for purposes other than those recommended.

2. Hazards identification

Hazard category

Flammable liquids	Category 3
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Toxic to reproduction	Category 1B
Toxic to reproduction(Effects on or via lactation)	additional category
Specific target organ systemic toxicity following single exposure	Category 1
Specific target organ systemic toxicity following repeated exposure	Category 1
Acute hazards to the aquatic environment	Category 3
Chronic hazards to the aquatic environment	Category 3

Label elements

Hazard pictograms:



Signal word:

Danger

Hazard statements:

H226 Flammable liquid and vapour.
 H315 Causes skin irritation.
 H319 Causes serious eye irritation.
 H360 May damage fertility or the unborn child.
 H362 May cause harm to breast-fed children.
 H370 Causes damage to organs (central nerve system,organ of vision,general systemic toxicant).
 H372 Causes damage to organs (central nerve system,organ of vision) through prolonged or repeated exposure.

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H402 Harmful to aquatic life

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements:

- Prevention**
- P201 Obtain special instructions before use.
 - P202 Do not handle until all safety precautions have been read and understood.
 - P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 - P233 Keep container tightly closed.
 - P240 Ground and bond container and receiving equipment.
 - P241 Use explosion-proof electrical/ventilating/lighting equipment.
 - P242 Use non-sparking tools.
 - P243 Take action to prevent static discharges.
 - P260 Do not breathe dust/fume/gas/mist/vapours/spray.
 - P263 Avoid contact during pregnancy/while nursing.
 - P264 Wash hands and face thoroughly after handling.
 - P270 Do not eat, drink or smoke when using this product.
 - P273 Avoid release to the environment.
 - P280 Wear protective gloves/protective clothing/eye protection/face protection.

- Response**
- P314 Get medical advice/attention if you feel unwell.
 - P362+P364 Take off contaminated clothing and wash it before reuse.
 - P302+P352 IF ON SKIN: Wash with plenty of water/or shower.
 - P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
 - P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 - P308+P313 IF exposed or concerned: Get medical advice/attention.
 - P308+P311 IF exposed or concerned: Call a POISON CENTER/doctor/healthcare professionals under the supervision of a doctor.
 - P332+P313 If skin irritation occurs: Get medical advice/attention.
 - P337+P313 If eye irritation persists: Get medical advice/attention.
 - P370+P378 In case of fire : Use appropriate extinguishing media for extinction.

Storage P405 Store locked up.

P403+P235 Store in a well ventilated place. Keep cool.

Disposal P501 Dispose of contents/container in accordance with local/regional/national/international regulation.

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3. Composition/information on ingredients

3.1. Substances Not Applicable
3.2. Mixtures

Ingredients and Concentration

Ingredient Name	Concentration wt.%	CAS RN®	Existing and New Chemical Substances (JAPAN)	Industrial Safety and Health Law Substances (JAPAN)	Industrial Safety and Health Law (JAPAN)	Pollutant Release Transfer Register Law (JAPAN)	Poisonous and Deleterious Substances Control Act (JAPAN)
			Gazette notice reference number	Gazette notice reference number	Notifiable Substances	Specified Substances	Poisonous and Deleterious Substances
Di(2-ethylhexyl) sulfosuccinic acid, sodium salt	70	577-11-7	2-1620, 2- 1623	Public	Not applicable	Not applicable	Not applicable
Methanol	10	67-56-1	2-201	Public	Applicable	Not applicable	Less than regulation
Water	20	7732-18-5	---	Public	Not applicable	Not applicable	Not applicable

4. First aid measures

Inhalation:	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If breathing is stopped, lie on your back and perform cardiopulmonary respiration. Get medical advice/attention.
Skin contact:	Take off contaminated clothing and wash before reuse. Wash with plenty of soap and water. If skin irritation or a rash occurs: Get medical advice/attention.
Eye contact:	Immediately flush eye with plenty of clean water for at least 15 minutes. (If easy to do, remove contact lenses, if worn.) Get medical attention immediately.
Ingestion:	After having swallowed it, Drink a large quantity of water when consciousness becomes clear and receive treatment for the doctor immediately. A mouth must not give a person without the consciousness a thing.
Protection for first aid person:	The rescuer wears a tool for appropriate protection depending on the situation.

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5. Firefighting measures

Suitable extinguishing media:	Use water spray(fog), foam, dry chemical or CO2.
Extinguishing media to avoid:	Straight stream water.
Specific hazards arising from the chemical:	At the time of fire, hazardous gases (carbon monoxide and others) can be generated.
Fire fighting:	Keep upwind of fire. Eliminate all ignition sources if safe to do so. In case of fire in the surroundings, move the content/container to the safety place. If it is not possible to move, cool the content/container with water spray.
Special protective equipment and precautions for fire fighters:	Gloves, protection glasses, wear fire, flame resistant, retardant clothing, air respiratory organs wear a tool for appropriate protection.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures:	Promptly remove possible ignition sources from the vicinity. Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.
Environmental precautions:	To environment (area of the sea, the soil) must not release it.
Methods and materials for containment and cleaning up:	Absorb this product with inactive materials (example: dry sand, earth) and recover it into a waste material container. In the case of large amount, stop leakage with earth/sand to begin with, and, then, recover it. In the case of a small quantity, I adsorb it in the earth and sand, a waste and collect it in empty container which I can seal up after having removed it.

7. Handling and storage

Handling	
Technical measures:	During handling, be sure to wear proper protective equipment (refer to the section 8). This product can be charged with static electricity. Take countermeasures for static electricity removal (grounding, others). Wear antistatic clothes and antistatic shoes to prevent human body electrification. Use explosion-proof electrical/ventilating/lighting equipment.
Ventilation requirements:	Use the ventilation equipment described in Section 8.

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Precautions for safe handling: Not especially.

Storage

Storage conditions: Store the containers avoiding direct sunlight. Store in less than 40°C in a well-ventilated room.

Safety adequate container materials: Use the container specified by the Fire Service ACT and the United Nations Transport Regulations.

8. Exposure controls/personal protection

Appropriate engineering controls: Use local ventilation equipment.
Install eye and body washing facilities near the handling place.
Display the position of equipment clearly.

Control parameters

Ingredient Name	Industrial Safety and Health Law (JAPAN)	Japan Society for Occupational Health	ACGIH-TLV	
	Administrative Control Levels	Occupational Exposure Limits	TWA	STEL
Di(2-ethylhexyl) sulfosuccinic acid, sodium salt	Not established	Not established	Not established	Not established
Methanol	200ppm -mg/m ³	200ppm Skin, 260mg/m ³ Skin	200ppm Skin, -mg/m ³	250ppm Skin, -mg/m ³

Personal protective equipment

Respiratory protection: Use a gas mask for organic gases, air-supplied respirator, self-contained compressed air breathing apparatus on the situation.

Hand protection: Organic solvent impermeable protective gloves (Antistatic ones are desirable.)

Eye/face protection: Protective glasses, goggle, protective face shield

Skin/body protection: Wear long-sleeved working clothes and protective shoes. (Antistatic ones are desirable.)
Use an oiliness apron-resistant, boots depending on the situation.

Hygiene measures: Wash with soap and water after handling.

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9. Physical and chemical properties

Product

Form:	Liquid (20°C)
Color:	Colorless~Light yellow
Odor:	No data.
Melting point/freezing point:	No data
Initial boiling point and boiling range:	68(°C)
Flammability (solid, gas):	No data
Upper/lower flammability or explosive limits:	6.0–36.5(%)
Flash point:	45.8(°C)
Auto-ignition temperature:	No data
Decomposition temperature:	No data
pH:	No data
Kinematic viscosity:	No data
Solubility:	water : Soluble.
Partition coefficient: n-octanol/water:	No data
Vapour pressure:	No data
Specific Gravity:	1.080(20°C)
Vapour density:	No data
Particle characteristics:	No data

10. Stability and reactivity

Chemical stability:	Stable under normal temperatures and pressures.
Possibility of hazardous reactions:	It may react with the oxidizing agent and generate heat.
Conditions to avoid:	Avoid heat, flames, sparks and ignition sources.
Incompatible materials:	Acid, Oxidizing agents.
Hazardous decomposition products:	No data available

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11. Toxicological information

Product

Acute toxicity (oral):	No Classification
Acute toxicity (dermal):	No Classification
Acute toxicity (inhalation):	Classification not possible (Gas) Classification not possible (Vapour) Classification not possible (Dust/Mist)
Skin corrosion/irritation:	Category 2
Serious eye damage/irritation:	Category 2
Respiratory sensitization:	Classification not possible
Skin sensitization:	Classification not possible
Mutagenicity:	Classification not possible
Carcinogenicity:	Classification not possible
Reproductive toxicity:	Category 1B
Target organ effect/Single exposure:	Category 1(central nerve system,organ of vision,general systemic toxicant)
Target organ effect/Multi exposure:	Category 1(central nerve system,organ of vision)
Respiratory toxic:	Classification not possible

Ingredient

Di(2-ethylhexyl) sulfosuccinic acid, sodium salt

Acute toxicity (oral):	No Classification LD50: 1800-4300 mg/kg[rat]
Acute toxicity (dermal):	No Classification LD50:> 10000 mg/kg[rabbit]
Acute toxicity (inhalation):	Exempt classification (Gas) Classification not possible (Vapour) Classification not possible (Dust/Mist) Effect on animals : No data
Skin corrosion/irritation:	Category 2 Effect on animals : Necrosis with score values of 2.33 (erythema) and 2.5 (edema) after 24 hours and core values of 1.66 (erythema) and 1.6 (edema) after 72 hours in a study in which 0.5 mL was occluded and applied to rabbits And from the description that no irreversible change was observed (IUCLED (2000)), it was classified as Category 2.
Serious eye damage/irritation:	Category 2 Effect on animals : No necrosis or irreversible changes were observed in rabbits with 100 mg (IUCLED (2000)), and 250 μg was applied to rabbits with mild irritation. From the description of (Mild irritation) (HPVIS (2009)), it was classified as Category 2.
Respiratory sensitization:	Classification not possible Effect on person : No data

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Skin sensitization:	Classification not possible Effect on person : No data
Mutagenicity:	Classification not possible Cannot be classified due to lack of in vivo test data.
Carcinogenicity:	Classification not possible No data
Reproductive toxicity:	Category 2 In a mixed-fed study of pregnant rats during organogenesis, exposure to suppressed weight gain in mothers significantly increased absorption embryos and external malformations in offspring (JECFA 723 (1991)). From the description of, it was classified as Category 2. In addition, in a three-generation mixed diet study (0, 0.5, or 1.0% Mixed diet) of rats, the secretion of the substance into breast milk showed suppression of weight gain and decreased survival rate, which are thought to be caused by malnutrition in the offspring. (JECFA 723 (1991)), it was classified as "additional category: effect on or through breastfeeding".
Target organ effect/Single exposure:	Classification not possible In an acute oral exposure test in rats (dose: 2820, 3560, 4480, 5040 mg / kg), death was observed in the group receiving 3560 mg / kg or more, and most of the deaths were 6-24 hours after exposure. Seen within. As toxic symptoms, prone state and lethargy were observed, and yellow liquid was observed in the gastrointestinal tract in dead animals, but no visible disorder was observed in the dissection of living animals (USEPA / HPV (2001)). There is. However, the above study was conducted at a high dose exceeding the upper limit of the guidance value of Category 2, and the effect on the dose within the guidance value was unknown, so it was judged as "cannot be classified" due to lack of data.
Target organ effect/Multi exposure:	Classification not possible In a 90-day dietary administration test (1% diet (converted value: 500 mg / kg / day)) of rats, no death or abnormal behavior was observed, and weight gain, food intake, hematology test, urinalysis, disease From the description (USEPA HPV (2001)) that no administration-related effects were observed in physical examination, oral exposure was not classified, but toxic effects of other routes (inhalation, transdermal). There is no data, and there is no data, so it cannot be classified.
Respiratory toxic:	Classification not possible Effect on person : No data

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Methanol

Acute toxicity (oral):	Category 4 LD50: 1400 mg/kg[human], LD50: 6200-9100 mg/kg[rat]
Acute toxicity (dermal):	No Classification LD50: 15800 mg/kg[rabbit]
Acute toxicity (inhalation):	Exempt classification (Gas) No Classification (Vapour) LC50:> 31500 ppm[rat]
Skin corrosion/irritation:	Classification not possible (Dust/Mist) Classification not possible Effect on animals : Although there is an unpublished report that when applied to the skin of rabbits under occlusive conditions for up to 20-hour the substance was not irritating (DFGOT vol. 16 (2001)), classification was not possible due to lack of data in a skin irritation test.
Serious eye damage/irritation:	Category 2 Effect on animals : In a rabbit Draize test, mean scores of conjunctivitis were judged to be 2 and higher (2.1) at 24, 48 and 72-hour after installation. Chemosis (score of 2.00) observed up to 4-hour had decreased significantly by 72-hour (score of 0.50) (EHC 196 (1997)). Since it is not clear whether the effects reversed within 7 days, sub-categorization was not performed. Based on the data, the substance was classified into Category 2.
Respiratory sensitization:	Classification not possible Effect on person : No data available.
Skin sensitization:	No Classification Effect on person : not entered, Effect on animals : Based on a result of "not sensitizing" in a guinea pig skin sensitizing test (Magnusson-Kligman maximization test) (EHC 196 (1997)), the substance was classified as "Not classified".
Mutagenicity:	No Classification Based on negative results in mouse erythrocyte micronucleus tests (in vivo somatic cell mutagenicity tests) by inhalation exposure (EHC 196 (1997)) and by intraperitoneal administration (DFGOT vol. 16 (2001), PATTY (5th, 2001)), the substance was classified as "Not classified".

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Carcinogenicity:

Classification not possible

In unpublished tests conducted by The New Energy Development Organization (NEDO) in Japan, no evidence of carcinogenicity was found in rats, mice or monkeys (EHC 196 (1997)). There is a report that there was a significant dose-response relationship for male and female rats for carcinomas of the head and neck and for females only hemolymphoreticular neoplasms when the substance was administered to rats in drinking water from 8-weeks until spontaneous death occurred (ACGIH (2009)). Determining tumors after spontaneous death is not comparable to the standard procedure, therefore, the evaluation or comparison is considered to be difficult. Based on the above information, classification was not possible.

Reproductive toxicity:

Category 1B

In a developmental toxicity test by inhalation exposure to mice during organogenesis period, fetal resorptions and exencephaly were observed (PATY (5th, 2001)). Additionally, similar effects including cleft palate were reported in other inhalation and oral exposure tests (EHC 196 (1997), DFGOT vol. 16 (2001)). For effects of methanol on reproduction, scientific decisions concerning health risks are generally based on what is known as "weight-of-evidence" approach. Recognizing the lack of human data and the clear evidence of laboratory animal effects, it was concluded that methanol may adversely affect human development if exposures are sufficiently high (NTP-CERHR Monograph (2003)). Based on the information, the substance was considered to be a presumed human reproductive toxicant and was classified into Category 1B.

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- Target organ effect/Single exposure: Category 1(central nerve system,organ of vision,general systemic toxicant)
 Category 3(anesthetic action)
 The symptoms of acute poisoning from the substance include CNS-depression. Formate accumulates in the blood during a latency period which leads to metabolic acidosis, visual impairment or even total blindness, headaches, dizziness, nausea, vomiting, Kussmaul breathing and coma. In some cases death is the final outcome (DFGOT vol. 16 (2001), EHC 196 (1997)). Further, CNS disorders, especially parkinsonism-like extrapyramidal symptoms were reported (DFGOT vol. 16 (2001)). Morphological changes, necrosis in the white substance of the brain were demonstrated (DFGOT vol. 16 (2001)). Based on the human information, the substance was classified into Category 1 (central nervous system). Additionally, the eye was regarded as a target organ since visual impairment is a characteristic effect. Additionally, systemic toxicity is regarded as a target organ based on the reports of headache, nausea, vomiting, tachypnea and coma as signs of metabolic acidosis. The effects of single exposures by inhalation include narcosis (EHC 196 (1997), PATTY (5th, 2001)). As an acute toxicity in humans, a narcotic effect results from central nervous system depression (PATTY (5th, 2001)). Based on the data, the substance was classified into Category 3 (narcotic effects).
- Target organ effect/Multi exposure: Category 1(central nerve system,organ of vision)
 Based on a report that the most noted health consequence of longer-term exposure to lower levels of methanol is a broad range of ocular effects (EHC 196 (1997)), and that cases of chronic poisoning from occupational exposure to methanol were manifested by bilateral blindness (ACGIH (7th, 2001)), the substance was classified into Category 1 (eye). Additionally, based on the report that cases of chronic poisoning from repeated exposure to methanol vapour are manifested by headache, giddiness, insomnia, and gastric disturbances (ACGIH (7th, 2001)), the substance was classified into Category 1 (central nervous system). There are reports that changes in liver weight and hepatocellular hypertrophy were observed in rat oral administration tests (PATTY (5th, 2001), IRIS (2005)), however, these findings are considered to be adaptive changes and were not used as the basis of classification.
- Respiratory toxic: Classification not possible
 Effect on person : No data available
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Product

Ecotoxicity	
Acute toxicity:	Category 3
Chronic toxicity:	Category 3
Persistence and degradability :	No information.
Bioaccumulative potential :	No information.
Mobility in soil:	No information.
Hazardous to the ozone layer:	Classification not possible
Other impact :	No information.

Ingredient

Di(2-ethylhexyl) sulfosuccinic acid, sodium salt

Ecotoxicity	
Acute toxicity:	Category 3
Fish:	96hrLC50: 68.2 mg/L[Oryzias latipes]
Daphnia:	48hrEC50: 19.0 mg/L[Daphnia magna]
Algae:	No data
Chronic toxicity:	Category 3
Fish:	No data
Daphnia:	21dayNOEC: 7.03 mg/L[Daphnia magna]
Algae:	No data
Persistence and degradability :	Not rapidly biodegradable
Bioaccumulative potential :	Low bioconcentration
Hazardous to the ozone layer:	Classification not possible

Methanol

Ecotoxicity	
Acute toxicity:	No Classification
Fish:	96hrLC50: 15400 mg/L[Lepomis macrochirus]
Daphnia:	96hrLC50: 1340 mg/L[Penaeus aztecus]
Algae:	No data
Chronic toxicity:	No Classification
Fish:	No data
Daphnia:	No data
Algae:	No data
Persistence and degradability :	Readily biodegradable
Bioaccumulative potential :	No data
Hazardous to the ozone layer:	Classification not possible

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13. Disposal considerations

Disposal methods: When waste materials and waste water are to be treated, collect them into specified containers and entrust the disposal to a disposal contractor having an industrial waste disposal contractor permit.
Do not use the used containers for other purposes like filling other substances. Be sure to dispose of them after treating the content according to the above description. In case of recycling the container, return the container as it is after fitting a stopper without filling anything into it.

14. Transport information

International regulations: UN classification : 3
UN number : 1993
Proper shipping name : FLAMMABLE LIQUID, N.O.S.
Packing : III

Domestic restriction: Transport the material in accordance with the regulations in your country or region.

Specific security precaution and condition of transportation: Load the containers in such a way as not to wet with water, fall down, tumble, or being damaged. Cover the loaded cargo to prevent direct sunlight.

Emergency Response Guide (ERG) Numbers: 127

15. Regulatory information

Regulatory information with regard to this substance in your country or region should be examined by your own responsibility.

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16. Other information

Reference	Information obtained in NITE (National Institute of Technology and Evaluation) and other literature surveys.
Disclaimer	<p>About the description: This SDS was created in accordance with JIS Z 7253 based on the materials and data available at the time of creation.</p> <p>Detailed information such as composition and ingredients corresponding to overseas legal regulation registration confirmation etc. may not be described, so please contact our sales staff separately if necessary.</p> <p>Precautions are for normal handling. In case of special handling, it is the responsibility of the user to take safety measures suitable for the intended use and usage.</p> <p>We have paid close attention to the contents, but we do not guarantee the contents.</p> <p>This product can only be used for industrial purposes. If you want to use it for other purposes, please contact us in advance.</p>