

SAFETY DATA SHEET

Nippon Gohsei (UK) Limited

according to Regulation (EC) No.1907/2006

GOHSENTM Z-type

Revision Date 01.04.2014

Version 2.3

GB / EN

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

1.1 Product identifier

Trade name : GOHSENTM Z-type
Chemical Name : Modified Polyvinyl alcohol
CAS-No. : Listed
Registration number : no data available

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/Mixture : Binding agents, Adhesives, Dispersing agent, Coatings

1.3 Details of the supplier of the safety data sheet

Company : Nippon Gohsei(UK) Limited
Soanol House, Saletend
Kingston upon Hull, HU12 8DS
United Kingdom

Telephone : +44(0)1482 333320

E-mail address : info@nippon-gohsei.com

1.4 Emergency telephone number

+44(0) 1865 407 333
(CARECHEM 24)

2. Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Acute toxicity, Category 4	H302: Harmful if swallowed.
Acute toxicity, Category 4	H332: Harmful if inhaled.
Acute toxicity, Category 4	H312: Harmful in contact with skin.
Specific target organ toxicity - single exposure, Category 2	H371: May cause damage to organs.

Classification (67/548/EEC, 1999/45/EC)

Harmful : R20/21/22: Harmful by inhalation, in contact with skin and if swallowed.
: R68/20/21/22: Harmful: possible risk of irreversible effects through inhalation, in contact with skin and if swallowed.

2.2 Label elements

Labeling (REGULATION (EC) No 1272/2008)

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Hazard pictograms

:



Signal word

: Warning

Hazard statement

: H302
H312
H332
H371

Harmful if swallowed.
Harmful in contact with skin.
Harmful in inhaled.
May cause damage to oragans.

Precautionary statements

: **Prevention**

P260

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

P264

Wash skin thouroughly after handling.

P271

Use only outdoors or in a well-ventilated area.

P280

Wear protective gloves/ protective clothing.

Response:

P302 + P352

IF ON SKIN: Wash with plenty of soap and water.

P309 + P311

IF exposed or if you feel unwell: Call a POISON
CENTER or doctor/physician.

Labelling according to EC Directives: 67/548/EEC

Hazard symbols

:



Harmful

R-pharse(s)

: R20/21/22

Harmful by inhalation, in contact with skin and
if swallowed.

R68/20/21/22

Harmful: possible risk of irreversible effects
through inhalation, in contact with skin and
if swallowed.

S-pharse(s)

: S22

Do not breathe dust.

S36/37

Wear suitable protective clothing and gloves.

S60

This material and its container must be disposed
of as hazardous waste.

2.3 Other hazards

Dust can form an explosive mmixtue in air.

3. Composition/information on ingredients

3.1 Substances

This product is a chemical substance within the meaning of the REACH Regulation(1907/2006/EC).

The following table contains the main constituent at the top.

Further dangerous ingredients are mentioned when it is necessary in accordance with Appendix II
No. 3.1 of the REACH Regulation.

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Chemical Name	CAS-No.	EC-No. Regulation number	Index-No.	Content
Modified Polyvinyl Alcohol	Listed	-	-	>= 94.5%
Methanol	67-56-1	200-659-6	603-001-00-X	3.0% ~ 5.0%
Methyl Acetate	79-20-9	201-185-2	607-021-00-X	1.0% ~ 2.0%

4. First aid measures**4.1 Description of first aid measures**

- General advice : In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). First aider needs to protect himself. Move out of dangerous area. Never give anything by mouth to an unconscious person. Take off contaminated clothing and shoes immediately.
- If inhaled : If breathed in, move person into fresh air. Call a physician immediately. Keep patient warm and at rest. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.
- In case of skin contact : Call a physician immediately. In case of contact, immediately flush skin with soap and plenty of water. Do NOT use solvents or thinners.
- In case of eye contact : Protect unharmed eye. If easy to do, remove contact lens, if worn. In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- If swallowed : If swallowed, seek medical advice immediately and show this container or label. If swallowed, DO NOT induce vomiting. If a person vomits when lying on this his back, place him in the recovery position.

4.2 Most important symptoms and effects, both acute and delayed

no data available

4.3 Indication of any immediate medical attention and special treatment needed

no data available

5. Firefighting measures**5.1 Extinguishing media**

- Suitable extinguishing media : Water, Alcohol-resistant foam, Carbon dioxide(CO₂), Dry chemical

5.2 Special hazards arising from the substance or mixture

- Specific hazards during fire-fighting : Do not use a solid water stream as it may scatter and spread fire. Hazardous decomposition products may be formed under fire conditions (see section 10). Exposure to decomposition products may be a hazard to health.

5.3 Advice for firefighters

- Special protective equipment for fire-fighters : In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment.

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Further information : Standard procedure for chemical fires. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. In the event of fire and/or explosion do not breathe fumes. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Refer to protective measures listed in sections 7 and 8. Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Avoid contact with skin and eyes. Ensure adequate ventilation, especially in confined areas. Sweep up to prevent slipping hazard. Remove all sources of ignition.

6.2 Environmental precautions

Do not flush into surface water or sanitary sewer system. If the product contaminates rivers and lakes or drains inform respective authorities.

6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Use mechanical handling equipment. Keep in suitable, closed containers for disposal. Clean contaminated surface thoroughly.

6.4 Reference to other sections

see chapter: 7, 8, 11, 12 and 13

7. Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : For personal protection see section 8. Avoid creating dust. Do not breathe dust. Avoid contact with skin and eyes. Handle with care.

Advice on protection against fire and explosion : Normal measures for preventive fire protection. Take measures to prevent the build up of electrostatic charge. Use explosion-proof equipment.

Dust explosion class : no data available

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place.

Advice on common storage : Incompatible with oxidizing agents. Keep away from food, drink and animal feeding stuffs.

Other data : No decomposition if stored and applied as directed.

7.3 Specific end uses

no data available

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8. Exposure controls/personal protection**8.1 Control parameters**

Components	CAS-No.	Control parameter	Basis	Update
Methanol	67-56-1	STEL:333 mg/m ³ , 250ppm Sk TWA:266 mg/m ³ , 200ppm Sk	GB EH40	2005-04-06
Methly acetate	79-20-9	STEL:770 mg/m ³ , 250ppm TWA:616 mg/m ³ , 200ppm	GB EH40	2005-04-06
Components	CAS-No.	Control parameter	Basis	Update
Methanol	67-56-1	TWA: 260 mg/m ³ , 200 ppm skin,	2006/15/EC	2006-02-09

Other information on limit values: see chapter 16

8.2 Exposure controls**Engineering measures**

Provide sufficient air exchange and/or exhaust in work rooms.

Personal protective equipment

Respiratory protection : Wear respiratory protection.
Half mask with a particle filter P2 (EN 143).

Hand protection

Remarks : Wear suitable gloves. Choose gloves to protect hands against chemicals depending on the concentration and quantity of the hazardous substance and specific to place of work. For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective glove with the glove manufacturer.

Eye protection : Tightly fitting safety goggles.

Skin and body protection : Wear suitable protective clothing.
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice.
General industrial hygiene practice.
Do not breathe dust.
Avoid contact with skin, eyes and clothing.
When using do not eat, drink or smoke.
Wash hands before breaks and at the end of workday.
Follow the skin protection plan.
Wash contaminated clothing before re-use.

Environmental exposure controls

General advice : Do not flush into surface water or sanitary sewer system.
If the product contaminates rivers and lakes or drains inform respective authorities.

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9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	: powder, granular
Colour	: off-white, light yellow
Odour	: vinegar-like
Odour Threshold	: no data available
Flash point	: > 70 deg C
Ignition temperature	: 440 deg C
Lower explosion limit	: 35 g/m ³
Upper explosion limit	: no data available
Explosive properties	: no data available
Flammability(solid, gas)	: no data available
Oxidizing properties	: no data available
Autoignition temperature	: no data available
Burning number	: no data available
Molecular weight	: no data available
pH	: 3.0 - 5.5
Melting point/range	: 150 - 230 deg C
Boiling point/boiling range	: no data available
Vapour pressure	: no data available
Density	: 1.19 - 1.31 g/cm ³
Bulk density	: 300 - 750 kg/m ³
Water solubility	: completely soluble
Partition coefficient: n-octanol/ water	: no data available
Solubility in other solvents	: insoluble Medium:ethyl acetate insoluble Medium:Benzene insoluble Medium:toluene insoluble Medium:isobutyl methyl ketone
Viscosity, dynamic	: no data available
Viscosity, kinematic	: no data available
Flow time	: no data available
Impact Sensitivity	: no data available
Relative vapour density	: no data available
Surface tension	: no data available
Evaporation rate	: no data available
Minimum ignition energy	: no data available
Acid number	: no data available
Refraction index	: no data available
Miscibility in water	: no data available
Solvent separation test	: no data available 6/10

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9.2 Other information

None known.

10. Stability and reactivity

10.1 Reactivity

no data available

10.2 Chemical stability

The product is chemically stable.

10.3 Possibility of hazardous reactions

Stability: No decomposition if stored and applied as directed.
Dust can form an explosive mixture in air.

10.4 Conditions to avoid

Heat, flames and sparks.

10.5 Incompatible materials

Materials to avoid : Strong oxidizing agents

10.6 Hazardous decomposition products

Hazardous decomposition products : In case of fire hazardous decomposition products may be produced such as:
Carbon monoxide, carbon dioxide and unburned hydrocarbons(smoke).

Thermal decomposition : ≥ 200 deg C
1,100 KJ/mol

11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Acute oral toxicity : LD50 mouse: > 8,000 mg/kg

Acute inhalation toxicity

methanol : LC50(rat): 85 mg/l, 64,000ppm
Exposure time: 4h

Acute dermal toxicity

no data available

Acute toxicity (other routes of administration):

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no data available

Skin corrosion/irritation

Skin irritation : Species: rabbit
Slightly irritation

Serious eye damage/eye irritation

Eye irritation : Species: rabbit
Slightly irritation

Respiratory or skin sensitization

Sensitisation:

no data available

Germ cell mutagenicity

Genotoxicity in vitro: : Type: Ames test
Result: negative

Carcinogenicity

Remarks : Carcinogenicity:
Did not show carcinogenic effects in animal experiments.

Reproductive toxicity

no data available

Teratogenicity

no data available

STOT - single exposure

no data available

STOT - repeated exposure

no data available

Aspiration hazard

Aspiration toxicity

no data available

Neurological effects

no data available

Toxicology Assessment

Toxicology, Metabolism, Distribution

no data available

Acute effects

no data available

Further information

methanol : Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

12. Ecological information

12.1 Toxicity

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Toxicity to daphnia and other aquatic invertebrates.

methanol : LC50(Oryzias latipes(Orange-red killifish)): > 32,000 mg/kg
Exposure time: 48 h

12.2 Persistence and degradability

Biodegradability

methanol : Result: Readily biodegradable.

12.3 Bioaccumulative potential

Bioaccumulation

methanol : Remarks:
Bioaccumulation is unlikely.

12.4 Mobility in soil

no data available

12.5 Results of PBT and vPvB assessment

no data available

12.6 Other adverse effects

Additional ecological information : The product should not be allowed to enter drains, water courses of the soil.

13. Disposal considerations

13.1 Waste treatment methods

Advice on disposal and packaging : Disposal:
In accordance with local and national regulations. Do not dispose of waste into sewer. This material and its container must be disposed of as hazardous waste. Do not dispose of together with household waste. Waste codes should be assigned by the user based on the application for which the product was used.

14. Transport information

ADR

Not dangerous goods

RID

Not dangerous goods

IATA

Not dangerous goods

IMDG

Not dangerous goods

Special precautions for user

see chapter: 6, 7 and 8

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15. Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Directive 96/82/EC : Update: 2003
Directive 96/82/EC does not apply

Further information : Reserved for industrial and professional use.

15.2 Chemical Safety Assessment

no data available

16. Other information

Full text of R-phrases referred to under section 2 and 3

R20/21/22 Harmful by irritation, in contact with skin and if swallowed.
R68/20/21/22 Harmful: possible risk of irreversible effects through inhalation, in contact with skin and if swallowed.

Full text of H-phrases referred to under section 2 and 3

H302 Harmful if swallowed.
H312 Harmful in contact with skin
H332 Harmful if inhaled.
H371 May cause damage to organs.

Other information

Sk Can be absorbed through skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.
skin Identifies the possibility of significant uptake through the skin

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.