

Syntilo 9902 BF

In accordance with Industrial Safety and Health Act

MSDS Approval Number

AA00907-0000000046

Section 1. Chemical product and company identification

Product name Syntilo 9902 BF
Code 466262-KR01
SDS no. 466262
Supplier BP Korea Ltd.
19F., 302, Teheran-ro, Gangnam-gu, Seoul, 06210
Republic of Korea

Tel: +82 -1577-1904

EMERGENCY TELEPHONE NUMBER Carechem: +65 3158 1074 (24/7)

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

Use of the substance/ mixture Metalworking fluid - soluble.
For specific application advice see appropriate Technical Data Sheet or consult our company representative.

Section 2. Hazards identification

GHS Classification SKIN IRRITATION - Category 2
EYE IRRITATION - Category 2A
LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2

GHS label elements, including precautionary statements

Symbol



Signal word Warning

Hazard statements H315 - Causes skin irritation.
H319 - Causes serious eye irritation.
H411 - Toxic to aquatic life with long lasting effects.

Precautionary statements

Prevention

P280 - Wear protective gloves. Wear eye or face protection.
P273 - Avoid release to the environment.
P264 - Wash hands thoroughly after handling.

Response

P391 - Collect spillage.
P362 + P364 - Take off contaminated clothing and wash it before reuse.
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water.
P332 + P313 - If skin irritation occurs: Get medical attention.
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313 - If eye irritation persists: Get medical attention.

Storage

Not applicable.

Disposal

P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

Section 2. Hazards identification

Other hazards which do not result in classification Defatting to the skin.

Section 3. Composition/information on ingredients

Substance/mixture Mixture
Corrosion inhibitors and additives in aqueous solution.
Hazardous ingredients

Ingredient name	Synonym	CAS number	%
2,2',2''-nitrilotriethanol	Ethanol, 2,2',2''-nitrilotris-; TRIETHANOLAMINE; 2,2', 2''-Trihydroxyethylamine; Tris(2-hydroxyethyl)amine; trolamine; Ethanol, 2,2',2''-nitrilotri-; ETHANOL, 2,2',2''-NITRILOTRIS-; TRIS (BETA-HYDROXYETHYL) AMINE; NITRILOTRIETHANOL; 2,2',2''-NITRILOTRIS (ETHANOL); Trihydroxytriethylamine	102-71-6	19.98682
Triethanolamine with 3,5,5-trimethylhexanoic acid	-	-	5.94865
2-Aminoethanol with Octanoic acid and Decanoic acid	-	-	3.87411
2-Aminoethanol with 3,5,5-trimethylhexanoic acid	-	-	3.65881
2-Aminoethanol with undecanoic acid and dodecanedioic acid	-	-	1.77673
2-Aminoethanol with sebacic acid	-	-	0.61309
1,2-ethanediamine, N,N,N',N'-tetramethyl-, polymer with 1,1'-oxybis(2-chloroethane)	1,2-Ethanediamine, N,N,N', N'-tetramethyl-, polymer with 1,1'-oxybis [2-chloroethane]; Poly [oxyethylene(dimethylimino) ethylene(dimethylimino) ethylene; Polyoxyethylenedimethyliminoethylene dichloride; Poly(oxyethylene (dimethyliminio)ethylene (dimethyliminioethlene)) dichloride; Poly(oxyethylene (dimethyliminio)ethylene (dimethyliminioethlene)) dichloride; 1,2-Ethanediamine, N,N,N', N'-tetramethyl-, polymer with 1,1'-oxybis (2-chloroethane); N,N,N',N'- Tetramethylethylenediaminebis (2-chloroethyl)ether copolymer; n,n,n',n'- tetramethylethylenediamine-bis-(2-chloroethyl) ether copolymer; N,N,N', N'-Tetramethylethylenediaminebis	31075-24-8	0.42

Section 3. Composition/information on ingredients

3-Iodo-2-propynyl butylcarbamate	(2-chloroethyl)ether copolymer; Tetramethylethylenediamine-Dichloroethyl ether polycondensate 3-iodoprop-2-yn-1-yl butylcarbamate; Carbamic acid, N-butyl-, 3-iodo-2-propyn-1-yl ester; Carbamic acid, butyl-, 3-iodo-2-propynyl ester; IODOPROPYNYL BUTYLCARBAMATE; Iodocarb; 3-iodo-2-propynyl butylcarbamate; iodocarb; 3-iodo-2-propynyl n-butylcarbamate; IPBC; N-Butylcarbamic acid, 3-iodo-2-propyn-1-yl ester; 3-iodo-2-propynyl-n-butyl carbamate; Butylcarbamic acid 3-iodo-2-propynyl ester	55406-53-6	0.2
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Non-hazardous ingredients

Ingredient name	Synonym	CAS number	%
Trade secret.	Trade secret.	Trade secret.	62.006 - 62.206
Trade secret.	Trade secret.	Trade secret.	1.1261
Trade secret.	Trade secret.	Trade secret.	0.14

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Eye contact

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Check for and remove any contact lenses. Get medical attention.

Skin contact

In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention. If skin irritation or rash occurs: Get medical advice/attention.

Inhalation

If inhaled, remove to fresh air. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. Get medical attention if symptoms occur.

Ingestion

Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Wash out mouth with water if person is conscious. Get medical attention if adverse health effects persist or are severe.

Indication of immediate medical attention and special treatment needed, if necessary

Specific treatments

No specific treatment.

Section 4. First aid measures

Notes to physician

Treatment should in general be symptomatic and directed to relieving any effects. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Protection of first-aiders

No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

Section 5. Firefighting measures

Extinguishing media

Suitable

In case of fire, use water fog, alcohol resistant foam, dry chemical or carbon dioxide extinguisher or spray.

Not suitable

Do not use water jet.

Specific hazards arising from the chemical

Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain. In a fire or if heated, a pressure increase will occur and the container may burst. This material is toxic to aquatic life with long lasting effects.

Hazardous thermal decomposition products

Combustion products may include the following:
carbon oxides (CO, CO₂) (carbon monoxide, carbon dioxide)
nitrogen oxides (NO, NO₂ etc.)

Special protective equipment for fire-fighters

Fire-fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

Special protective actions for fire-fighters

No action shall be taken involving any personal risk or without suitable training. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Contact emergency personnel. No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Avoid breathing vapour or mist. Provide adequate ventilation. Put on appropriate personal protective equipment. Floors may be slippery; use care to avoid falling.

Environmental precautions

Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

Methods and material for containment and cleaning up

Small spill

Stop leak if without risk. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill

Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Contaminated absorbent material may pose the same hazard as the spilt product. Dispose of via a licensed waste disposal contractor.

Section 7. Handling and storage

Precautions for safe handling

Protective measures

Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container. Avoid contact of spilt material and runoff with soil and surface waterways. Avoid prolonged or repeated contact with skin. During metal working, solid particles from workpieces or tools will contaminate the fluid and may cause abrasions of the skin. Where such abrasions result in a penetration of the skin, first aid treatment should be applied as soon as reasonably possible. The presence of certain metals in the workpiece or tool, such as chromium, cobalt and nickel, can contaminate the metalworking fluid and as a result may induce allergic skin reactions. Evaporation of water from soluble cutting fluids during use may lead to an increase in concentration which may result in the development of skin conditions due to irritation and defatting. It is important to monitor fluid strength on a regular basis with a refractometer and maintain it at the recommended concentration. Lubricants from other sources and other contaminants should be minimised. Swarf and other debris should be removed. To maintain optimum performance and minimise bacterial spoilage, machine tool coolant systems should be cleaned on a regular basis.

Advice on general occupational hygiene

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Wash thoroughly after handling. Remove contaminated clothing and protective equipment before entering eating areas. Contaminated work clothing should not be allowed out of the workplace. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Store and use only in equipment/containers designed for use with this product. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

Not suitable

Prolonged exposure to elevated temperature

Section 8. Exposure controls/personal protection

Control parameters

Ingredient name	Exposure limits
2,2',2''-nitrilotriethanol	ACGIH TLV (United States). TWA: 5 mg/m ³ 8 hours. Issued/Revised: 9/1994

Biological exposure indices

No exposure indices known.

Other ingredients including trade secret: not applicable

Recommended monitoring procedures

Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Section 8. Exposure controls/personal protection

Appropriate engineering controls

All activities involving chemicals should be assessed for their risks to health, to ensure exposures are adequately controlled. Personal protective equipment should only be considered after other forms of control measures (e.g. engineering controls) have been suitably evaluated. Personal protective equipment should conform to appropriate standards, be suitable for use, be kept in good condition and properly maintained.

Your supplier of personal protective equipment should be consulted for advice on selection and appropriate standards. For further information contact your national organisation for standards.

Provide exhaust ventilation or other engineering controls to keep the relevant airborne concentrations below their respective occupational exposure limits.

The final choice of protective equipment will depend upon a risk assessment. It is important to ensure that all items of personal protective equipment are compatible.

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Personal protective equipment

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment.

For protection against metal working fluids, respiratory protection that is classified as "resistant to oil" (class R) or oil proof (class P) should be selected where appropriate. Depending on the level of airborne contaminants, an air-purifying, half-mask respirator (with HEPA filter) including disposable (P- or R-series) (for oil mists less than 50mg/m³), or any powered, air-purifying respirator equipped with hood or helmet and HEPA filter (for oil mists less than 125 mg/m³).

Where organic vapours are a potential hazard during metalworking operations, a combination particulate and organic vapour filter may be necessary.

The correct choice of respiratory protection depends upon the chemicals being handled, the conditions of work and use, and the condition of the respiratory equipment. Safety procedures should be developed for each intended application. Respiratory protection equipment should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.

Eye protection

Avoid contact with eyes. Chemical splash goggles.

Hand protection

Wear suitable gloves. Undiluted fluid: Wear chemical resistant gloves.

Recommended: nitrile gloves.

Diluted fluid: Wear protective gloves if prolonged or repeated contact is likely.

Recommended: nitrile gloves. The correct choice of protective gloves depends upon the chemicals being handled, the conditions of work and use, and the condition of the gloves (even the best chemically resistant glove will break down after repeated chemical exposures). Most gloves provide only a short time of protection before they must be discarded and replaced. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. Gloves should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.

Skin protection

Use of protective clothing is good industrial practice.

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Cotton or polyester/cotton overalls will only provide protection against light superficial contamination that will not soak through to the skin. Overalls should be laundered on a regular basis. When the risk of skin exposure is high (e.g. when cleaning up spillages or if there is a risk of splashing) then chemical resistant aprons and/or impervious chemical suits and boots will be required.

Section 8. Exposure controls/personal protection

Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Section 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

Physical state

Liquid.

Colour

Colourless.

Odour

Not available.

Odour threshold

Not available.

pH

8.63 [Conc. (% w/w): 5%]

Melting/freezing point

Not available.

Boiling point, initial boiling point, and boiling range

Not available.

Flash point

Open cup: Not applicable. [Cleveland]

Unmeasurable Water content interferes with flash point determination.

Evaporation rate

Not available.

Flammability (solid, gas)

Not available.

Not applicable. Based on - Physical state

Lower and upper explosive (flammable) limits

Not available.

Vapour pressure

Ingredient name	Vapour Pressure at 20 °C			Vapour pressure at 50 °C		
	mm Hg	kPa	Method	mm Hg	kPa	Method
Water	17.5	2.3				
2,2',2''-nitritotriethanol	<0.0075	<0.001				

Solubility(ies)

Media	Result
Water	Soluble

Vapour density

Not available.

Relative density

Not available.

Density

>1000 kg/m³ (>1 g/cm³) at 15°C

Partition coefficient: n-octanol/water

Not applicable.

Auto-ignition temperature

Ingredient name	°C	°F	Method
2,2',2''-nitritotriethanol	324	615.2	

Decomposition temperature

Not available.

Viscosity

Not available.

Molecular weight

Not applicable as it is a mixture

Particle characteristics

Median particle size

Not applicable.

Section 10. Stability and reactivity

Chemical stability	The product is stable.
Possibility of hazardous reactions	Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous polymerisation will not occur.
Conditions to avoid	No specific data.
Incompatible materials	Reactive or incompatible with the following materials: oxidising materials. Slightly reactive or incompatible with the following materials: acids.
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on likely routes of exposure Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.

Acute toxicity

Inhalation	Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
Ingestion	Irritating to mouth, throat and stomach.
Skin contact	Causes skin irritation. Defatting to the skin.
Eye contact	Causes serious eye irritation.
Symptoms related to the physical, chemical and toxicological characteristics	
Inhalation	No specific data.
Ingestion	No specific data.
Skin	Adverse symptoms may include the following: irritation redness dryness cracking
Eyes	Adverse symptoms may include the following: pain or irritation watering redness

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

Product/ingredient name	Test	Species	Result	Exposure	Remarks
2-ethanediamine, N, N,N',N'-tetramethyl-, polymer with 1,1'-oxybis (2-chloroethane)	LC50 Inhalation Vapour	Rat	2.9 mg/l	4 hours	-
	LD50 Dermal	Rabbit	>2000 mg/kg	-	-
	LD50 Oral	Rat	1951 mg/kg	-	-
3-Iodo-2-propynyl butylcarbamate	LD50 Oral	Rat	1.5 g/kg	-	-
	LD50 Oral	Rat - Female	1.1 g/kg	-	-

Irritation/Corrosion

Product/ingredient name	Test authority / Test number	Species	Route / Result	Conc.	Remarks
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Section 11. Toxicological information

1,2-ethanediamine, N,N,N',N'-tetramethyl-, polymer with 1,1'-oxybis(2-chloroethane)	-	Unspecified	Eyes - Moderate irritant	-	-
	-	Unspecified	Skin - Slightly irritating to the skin.	-	-

Skin corrosion or irritation Not available for product and all ingredients.

Serious eye damage/eye irritation Not available for product and all ingredients.

Respiratory Irritation Not available for product and all ingredients.

Sensitisation

Respiratory Sensitisation Not available for product and all ingredients.

Skin Sensitisation

Product/ingredient name	Route of exposure	Species	Result	Remarks
1,2-ethanediamine, N,N,N',N'-tetramethyl-, polymer with 1,1'-oxybis(2-chloroethane)	skin	Unspecified	Not sensitising	-

CMR - ISHA Article 42 Public Notice No 2016-41 Occupational Exposure Limits

Product/ingredient name	CAS number	Classification
Not available for product and all ingredients.		

Carcinogenicity

Not available for product and all ingredients.

Germ cell mutagenicity

Product/ingredient name	Test	Experiment	Result	Remarks
Not available for product and all ingredients.				

Reproductive toxicity

Product/ingredient name	Test detail	Species	Exposure	Developmental toxin	Maternal toxicity	Fertility	Remarks
Not available for product and all ingredients.							
Teratogenicity	No known significant effects or critical hazards.						
Developmental effects	No known significant effects or critical hazards.						
Fertility effects	No known significant effects or critical hazards.						

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
3-Iodo-2-propynyl butylcarbamate	Category 3	-	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Section 11. Toxicological information

Name	Category	Route of exposure	Target organs
3-Iodo-2-propynyl butylcarbamate	Category 1	-	larynx

Potential chronic health effects

General	No known significant effects or critical hazards.
Carcinogenicity	No known significant effects or critical hazards.
Mutagenicity	No known significant effects or critical hazards.

Aspiration hazard

Not available for product and all ingredients.

Other information Not available.

Section 12. Ecological information

Ecotoxicity Water polluting material. May be harmful to the environment if released in large quantities. This material is toxic to aquatic life with long lasting effects.

Persistence/degradability

Expected to be biodegradable.

Mobility in soil Liquid. Soluble in water.

Bioaccumulative potential Not available.

Other adverse effects No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods	The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. Diluted Fluid The spent diluted fluid comprises a relatively stable emulsion. Dispose of via an authorised person/ licensed waste disposal contractor or by other suitable waste treatment techniques (e.g. emulsion splitting, coagulation and filtration) approved by the local authority. Spent fluid should never be disposed of down the drain. The aqueous phase should not be discharged into sewage systems unless provided for by local regulations; the non-aqueous phase should be disposed of as undiluted fluid. Note that separated aqueous solutions or effluents may contain metal salts as well as traces of oil and must be checked for conformity in these respects against consents given by the authorities before disposal. Further treatment may be required.
Disposal precautions	This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spill material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	IMDG	IATA
A. UN number	UN3082	UN3082
B. UN proper shipping name	Environmentally hazardous substance, liquid, n. o.s.. Marine pollutant (1,2-ethanediamine, N,N, N',N'-tetramethyl-, polymer with 1,1'-oxybis (2-chloroethane))	Environmentally hazardous substance, liquid, n. o.s. (1,2-ethanediamine, N,N,N',N'-tetramethyl-, polymer with 1,1'-oxybis(2-chloroethane))
C. Transport hazard class(es)	9  	9  
D. Packing group	III	III
E. Environmental hazards	Yes.	Yes.
F. Additional information	This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8. Emergency schedules F-A, S-F	This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8.

Special precautions for user Not available.

Section 15. Regulatory information

Regulation according to ISHA

ISHA article 117 (Harmful substances prohibited from manufacture) None of the components are listed.

ISHA article 118 (Harmful substances requiring permission) None of the components are listed.

Exposure Limits of Chemical Substances and Physical Factors

The following components have an OEL:
2,2',2''-nitrilotriethanol

ISHA Enforcement Regs Annex 19 (Exposure standards established for harmful factors) The following components are listed: ethylene oxide

ISHA Enforcement Regs Annex 21 (Harmful factors subject to Work Environment Measurement) None of the components are listed.

ISHA Enforcement Regs Annex 22 (Harmful Factors Subject to Special Health Check-up) None of the components are listed.

Section 15. Regulatory information

Standard of Industrial Safety and Health Annex 12 (Hazardous substances subject to control) None of the components are listed.

Regulation according to Chemicals Control Act

Article 20 Toxic Chemicals (K-Reach Article 20) Not applicable

Article 18 Prohibited (K-Reach Article 27) None of the components are listed.

Article 20 Restricted (K-Reach Article 27) None of the components are listed.

CCA Article 11 (TRI) None of the components are listed.

CCA Article 39 (Accident Precaution Chemicals) None of the components are listed.

Dangerous Materials Safety Management Act Not regulated.

Wastes regulation Designated Waste

Regulation according to other foreign laws

Australia inventory (AIRC) All components are listed or exempted.

Canada inventory All components are listed or exempted.

China inventory (IECSC) All components are listed or exempted.

REACH Status For the REACH status of this product please consult your company contact, as identified in Section 1.

Japan inventory (CSCL) All components are listed or exempted.

Korea inventory (KECI) All components are listed or exempted.

Philippines inventory (PICCS) At least one component is not listed.

Taiwan inventory (TCSI) All components are listed or exempted.

United States inventory (TSCA 8b) Not determined.

Section 16. Other information

History

Source of Information Sources of key data used to compile the Safety Data Sheet: Hazard assessment review data, toxicological reviews, and product physical properties; component supplier hazard communication data; and other publically available resources.

Date first prepared 01/06/2022

Number of revisions and date of last revision 3 15/08/2024.

Prepared by Product Stewardship

Key to abbreviations
AMP = Acceptable Maximum Peak
ACGIH = American Conference of Governmental Industrial Hygienists, an agency that promulgates exposure standards.
ADG = Australian Code for the Transport of Dangerous Goods by Road and Rail
ADG Code = Australian Code for the Transport of Dangerous Goods by Road and Rail
CAS Number = Chemical Abstracts Service Registry Number
HAZCHEM Code = Emergency action code of numbers and letters which gives information to emergency services. Its use is required by the ADG Code for

Section 16. Other information

Dangerous Goods in bulk.

ICAO = International Civil Aviation Organization.

IATA = International Air Transport Association, the organization promulgating rules governing shipment of goods by air.

IMDG = International Maritime Organization Rules, rules governing shipment of goods by water.

IP 346 = A chemical screening assay for dermal toxicity. The European Commission has recommended that Method IP 346 be used as the basis for labelling certain lubricant oil base stocks for carcinogenicity. The EU Commission has stipulated that the classification as a carcinogen need not apply if it can be shown that the substance contains less than 3% DMSO extract as measured by IP 346. (See Note L, European Commission Directive 67/548/EEC as amended and adapted.) DMSO is a solvent.

NOHSC = National Occupational Health & Safety Commission, Australia

REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006]

TWA = Time weighted average

STEL = Short term exposure limit

UN Number = United Nations Number, a four digit number assigned by the United Nations Committee of Experts on the Transport of Dangerous Goods.

TCCA = Toxic Chemical Control Act

GHS = Global Harmonized System

ISHA = Industrial Safety and Health Act

Varies = may contain one or more of the following 64741-88-4, 64741-89-5, 64741-95-3, 64741-96-4, 64742-01-4, 64742-44-5, 64742-45-6, 64742-52-5, 64742-53-6, 64742-54-7, 64742-55-8, 64742-56-9, 64742-57-0, 64742-58-1, 64742-62-7, 64742-63-8, 64742-65-0, 64742-70-7, 72623-85-9, 72623-86-0, 72623-87-1

 Indicates information that has changed from previously issued version.

[Notice to reader](#)

All reasonably practicable steps have been taken to ensure this data sheet and the health, safety and environmental information contained in it is accurate as of the date specified below. No warranty or representation, express or implied is made as to the accuracy or completeness of the data and information in this data sheet.

The data and advice given apply when the product is sold for the stated application or applications. You should not use the product other than for the stated application or applications without seeking advice from BP Group.

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