SAFETY DATA SHEET



SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name Syntilo 9954
Product code 458285-FR01
SDS no. 458285
Product type Liquid.

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

Identified uses

Handling and dilution of metal working fluid concentrates-Industrial Use of lubricants in high energy open processes-Industrial Use of lubricants in high energy open processes-Professional

Use of the substance/ Metalworking fluid - soluble.

mixture For specific application advice see appropriate Technical Data Sheet or consult our company

representative.

1.3 Details of the supplier of the safety data sheet

Supplier BP Southern Africa (Pty)Ltd

199 Oxford Road Oxford Parks Dunkeld, 2196 South Africa

Product Technical Helpdesk: 0800 111 551

E-mail address MSDSadvice@bp.com

1.4 Emergency telephone number

EMERGENCY +27 (0)860 222166

TELEPHONE NUMBER Tygerberg Poison Centre: +27 (0)21 931 6129

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition Mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Aquatic Chronic 3, H412

Additional information CLP: Not classified as hazardous when diluted below 10%.

See Section 16 for the full text of the H statements declared above.

See sections 11 and 12 for more detailed information on health effects and symptoms and environmental hazards.

2.2 Label elements

Signal word No signal word.

Hazard statements H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements

Prevention P273 - Avoid release to the environment.

Response Not applicable.
Storage Not applicable.

Disposal P501 - Dispose of contents and container in accordance with all local, regional, national and

international regulations.

Supplemental label

elements

Not applicable.

EU Regulation (EC) No. 1907/2006 (REACH)

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SECTION 2: Hazards identification

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles Not applicable.

Special packaging requirements

Containers to be fitted with child-resistant fastenings

Not applicable.

Tactile warning of danger

Not applicable.

2.3 Other hazards

Results of PBT and vPvB assessment

Product does not meet the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006,

Annex XIII.

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

Other hazards which do not result in classification

Defatting to the skin.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Product definition

Mixture

Corrosion inhibitors and additives in aqueous solution.

| Product/ingredient name | Identifiers | % | Regulation (EC) No. 1272/2008 [CLP] | Type |
|---|--|--------|--|------|
| disodium tetraborate decahydrate | EC: 215-540-4 CAS: 1303-96-4 Index: 005-011-01-1 | ≤5 | Eye Irrit. 2, H319 Repr. 1B, H360FD (Fertility and Unborn child) (oral) | [1] |
| 1,2-ethanediamine, N,N,N',N'- tetramethyl-, polymer with 1,1'-oxybis (2-chloroethane) | REACH #: Polymer CAS: 31075-24-8 | <0.25 | Acute Tox. 4, H302 Acute Tox. 4, H332 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=10) | [1] |
| See Section 16 for the full text of th | e H statements declared a | above. | | |
| disodium tetraborate decahydrate | 1303-96-4 | ≤5 | Eye Irrit. 2, H319 | [1] |

| disodium tetraborate decahydrate | 1303-96-4 | ≤5 | Eye Irrit. 2, H319 Repr. 1B, H360FD (Fertility and Unborn child) (oral) | [1] |
|---|------------|-------|--|-----|
| 1,2-ethanediamine, N,N,N',N'- tetramethyl-, polymer with 1,1'-oxybis (2-chloroethane) | 31075-24-8 | <0.25 | Acute Tox. 4, H302 Acute Tox. 4, H332 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=10) | [1] |

See Section 16 for the full text of the H statements declared above.

Type

- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit
- [3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
- [4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII
- [5] Substance of equivalent concern
- [6] Additional disclosure due to company policy

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

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SECTION 4: First aid measures

4.1 Description of 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 Wash skin thoroughly with soap and water or use recognised skin cleanser. Remove

contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before

reuse. Get medical attention if irritation develops.

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.

Do not induce vomiting unless directed to do so by medical personnel. Never give anything by Ingestion

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 symptoms occur.

No action shall be taken involving any personal risk or without suitable training. It may be **Protection of first-aiders**

dangerous to the person providing aid to give mouth-to-mouth resuscitation.

4.2 Most important symptoms and effects, both acute and delayed

See Section 11 for more detailed information on health effects and symptoms.

Potential acute health effects

Inhalation Exposure to decomposition products may cause a health hazard. Serious effects may be

delayed following exposure.

Ingestion No known significant effects or critical hazards.

Skin contact Defatting to the skin. May cause skin dryness and irritation.

Eye contact No known significant effects or critical hazards.

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

Inhalation Overexposure to the inhalation of airborne droplets or aerosols may cause irritation of the

respiratory tract.

Ingestion Ingestion of large quantities may cause nausea and diarrhoea.

Prolonged or repeated contact can defat the skin and lead to irritation and/or dermatitis. Skin contact

Eye contact Potential risk of transient stinging or redness if accidental eye contact occurs.

4.3 Indication of any immediate medical attention and special treatment needed

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.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing

media

Use foam or all-purpose dry chemical to extinguish.

Unsuitable extinguishing

media

Do not use water jet. The use of a water jet may cause the fire to spread by splashing the

burning product.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous combustion

Combustion products may include the following:

products

carbon oxides (CO, CO₂) (carbon monoxide, carbon dioxide)

metal oxide/oxides

nitrogen oxides (NO, NO2 etc.)

5.3 Advice for firefighters

Special precautions 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. This material is harmful to aquatic organisms. Fire water contaminated with this material must be

contained and prevented from being discharged to any waterway, sewer or drain.

Special protective equipment for fire-fighters Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for firefighters (including helmets, protective boots and gloves) conforming to European standard EN

469 will provide a basic level of protection for chemical incidents.

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SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

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. Floors may be slippery; use care to avoid falling. Avoid breathing vapour or mist. Provide adequate ventilation. Put on appropriate personal protective equipment.

For emergency responders

Entry into a confined space or poorly ventilated area contaminated with vapour, mist or fume is extremely hazardous without the correct respiratory protective equipment and a safe system of work. Wear self-contained breathing apparatus. Wear a suitable chemical protective suit. Chemical resistant boots. See also the information in "For non-emergency personnel".

6.2 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.

6.3 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.

6.4 Reference to other sections

See Section 1 for emergency contact information.

See Section 5 for firefighting measures.

See Section 8 for information on appropriate personal protective equipment.

See Section 12 for environmental precautions.

See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling

Protective measures

Put on appropriate personal protective equipment. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Avoid contact of spilt material and runoff with soil and surface waterways. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Do not reuse container. Empty containers retain product residue and can be hazardous. 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.

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. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

Store between the following temperatures: 5 to 40°C (41 to 104°F). Store in accordance with local regulations. Store in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Protect from freezing. Keep away from heat and direct sunlight. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Store and use only in equipment/containers designed for use with this product. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

7.3 Specific end use(s)

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SECTION 7: Handling and storage

Recommendations

See section 1.2 and Exposure scenarios in annex, if applicable.

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

8.1 Control parameters

Occupational exposure limits

Product/ingredient name

Exposure limit values

No exposure limit value known.

Whilst specific OELs for certain components may be shown in this section, other components may be present in any mist, vapour or dust produced. Therefore, the specific OELs may not be applicable to the product as a whole and are provided for guidance only

Recommended monitoring procedures

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Derived No Effect Level

No DNELs/DMELs available.

Predicted No Effect Concentration

No PNECs available

8.2 Exposure controls

Appropriate engineering controls

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

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. 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.

Individual protection measures

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. Ensure that eyewash stations and safety showers are close to the workstation location.

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.

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Eye/face protection **Skin protection**

Safety glasses with side shields.

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SECTION 8: Exposure controls/personal protection

Hand protection

General Information:

Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. The correct choice of protective gloves depends upon the chemicals being handled, and the conditions of work and use. Most gloves provide protection for only a limited time before they must be discarded and replaced (even the best chemically resistant gloves will break down after repeated chemical exposures).

Gloves should be chosen in consultation with the supplier / manufacturer and taking account of a full assessment of the working conditions.

Recommended: Nitrile gloves.

Breakthrough time:

Breakthrough time data are generated by glove manufacturers under laboratory test conditions and represent how long a glove can be expected to provide effective permeation resistance. It is important when following breakthrough time recommendations that actual workplace conditions are taken into account. Always consult with your glove supplier for up-to-date technical information on breakthrough times for the recommended glove type. Our recommendations on the selection of gloves are as follows:

Continuous contact:

Gloves with a minimum breakthrough time of 240 minutes, or >480 minutes if suitable gloves can be obtained.

If suitable gloves are not available to offer that level of protection, gloves with shorter breakthrough times may be acceptable as long as appropriate glove maintenance and replacement regimes are determined and adhered to.

Short-term / splash protection:

Recommended breakthrough times as above.

It is recognised that for short-term, transient exposures, gloves with shorter breakthrough times may commonly be used. Therefore, appropriate maintenance and replacement regimes must be determined and rigorously followed.

Glove Thickness:

For general applications, we recommend gloves with a thickness typically greater than 0.35 mm.

It should be emphasised that glove thickness is not necessarily a good predictor of glove resistance to a specific chemical, as the permeation efficiency of the glove will be dependent on the exact composition of the glove material. Therefore, glove selection should also be based on consideration of the task requirements and knowledge of breakthrough times. Glove thickness may also vary depending on the glove manufacturer, the glove type and the glove model. Therefore, the manufacturers' technical data should always be taken into account to ensure selection of the most appropriate glove for the task.

Note: Depending on the activity being conducted, gloves of varying thickness may be required for specific tasks. For example:

- Thinner gloves (down to 0.1 mm or less) may be required where a high degree of manual dexterity is needed. However, these gloves are only likely to give short duration protection and would normally be just for single use applications, then disposed of.
- Thicker gloves (up to 3 mm or more) may be required where there is a mechanical (as well as a chemical) risk i.e. where there is abrasion or puncture potential.

Skin and body

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.

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SECTION 8: Exposure controls/personal protection

Respiratory protection: EN 529 Refer to standards:

Gloves: EN 420, EN 374 Eye protection: EN 166 Filtering half-mask: EN 149

Filtering half-mask with valve: EN 405 Half-mask: EN 140 plus filter Full-face mask: EN 136 plus filter Particulate filters: EN 143 Gas/combined filters: EN 14387

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.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state Liquid.

Colour Yellow. [Light] Odour Not available. **Odour threshold** Not available.

8.5 [Conc. (% w/w): 3%]

Melting point/freezing point Initial boiling point and boiling

range

>100°C (>212°F)

Not available.

Closed cup: >100°C (>212°F) [Estimated. Water content interferes with flash point Flash point

determination.]

Evaporation rate Not available. Not available. Flammability (solid, gas) Upper/lower flammability or Not available.

explosive limits

Not available. Vapour pressure Not available Vapour density Relative density Not available.

Density >1000 kg/m³ (>1 g/cm³) at 15°C

Soluble in water. Solubility(ies) Partition coefficient: n-octanol/

water

Not available

Auto-ignition temperature Not available. **Decomposition temperature** Not available.

Kinematic: 200 mm²/s (200 cSt) at 40°C **Viscosity**

Not available. **Explosive properties** Not available. **Oxidising properties**

9.2 Other information

No additional information.

SECTION 10: Stability and reactivity

10.1 Reactivity No specific test data available for this product. Refer to Conditions to avoid and Incompatible

materials for additional information.

10.2 Chemical stability The product is stable.

10.3 Possibility of Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous polymerisation will not occur. hazardous reactions

10.4 Conditions to avoid High temperatures

10.5 Incompatible materials Reactive or incompatible with the following materials: oxidising materials.

Slightly reactive or incompatible with the following materials: acids:

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SECTION 10: Stability and reactivity

10.6 Hazardous Under normal conditions of storage and use, hazardous decomposition products should not be

decomposition products produce

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity estimates

| Product/ingredient name | Oral (mg/ kg) | Dermal (mg/kg) | Inhalation (gases) (ppm) | Inhalation (vapours) (mg/l) | Inhalation (dusts and mists) (mg/l) |
|---|------------------|-------------------|--------------------------------|-----------------------------------|--|
| 1,2-ethanediamine, N,N,N',N'-tetramethyl-, polymer with 1,1'-oxybis(2-chloroethane) | 500 | N/A | N/A | 11 | N/A |

Information on likely routes of exposure

Routes of entry anticipated: Dermal, Inhalation.

Potential acute health effects

Inhalation Exposure to decomposition products may cause a health hazard. Serious effects may be

delayed following exposure.

Ingestion No known significant effects or critical hazards.

Skin contact Defatting to the skin. May cause skin dryness and irritation.

Eye contact No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation No specific data.
Ingestion No specific data.

Skin contact Adverse symptoms may include the following:

irritation dryness cracking

Eye contact No specific data.

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

Inhalation Overexposure to the inhalation of airborne droplets or aerosols may cause irritation of the

respiratory tract.

Ingestion Ingestion of large quantities may cause nausea and diarrhoea.

Skin contact Prolonged or repeated contact can defat the skin and lead to irritation and/or dermatitis.

Eye contact Potential risk of transient stinging or redness if accidental eye contact occurs.

Potential chronic health effects

GeneralNo known significant effects or critical hazards.CarcinogenicityNo known significant effects or critical hazards.MutagenicityNo known significant effects or critical hazards.Developmental effectsNo known significant effects or critical hazards.Fertility effectsNo known significant effects or critical hazards.

SECTION 12: Ecological information

12.1 Toxicity

Environmental hazards Harmful to aquatic life with long lasting effects.

12.2 Persistence and degradability

Expected to be biodegradable.

12.3 Bioaccumulative potential

Not available.

12.4 Mobility in soil

Soil/water partition Not available.

coefficient (Koc)

Mobility Liquid. Soluble in water.

12.5 Results of PBT and vPvB assessment

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SECTION 12: Ecological information

Product does not meet the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII.

12.6 Other adverse effects No known significant effects or critical hazards.

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods

Product

Methods of disposal

Undiluted fluid Where possible, arrange for product to be recycled. Dispose of via an authorised person/ licensed waste disposal contractor in accordance with local regulations. 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.

Hazardous waste

Yes.

European waste catalogue (EWC)

| Waste code | Waste designation |
|------------|---|
| | synthetic machining oils machining emulsions and solutions free of halogens |

However, deviation from the intended use and/or the presence of any potential contaminants may require an alternative waste disposal code to be assigned by the end user.

Packaging

Methods of disposal

Where possible, arrange for product to be recycled. Dispose of via an authorised person/licensed waste disposal contractor in accordance with local regulations.

| Waste code | European waste catalogue (EWC) |
|------------|--|
| 15 01 10* | packaging containing residues of or contaminated by hazardous substances |

Special 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. Empty containers represent a fire hazard as they may contain flammable product residues and vapour. Never weld, solder or braze empty containers. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

References

Commission 2014/955/EU Directive 2008/98/EC

SECTION 14: Transport information

| | ADR/RID | ADN | IMDG | IATA |
|------------------------------------|----------------|----------------|----------------|----------------|
| 14.1 UN number | Not regulated. | Not regulated. | Not regulated. | Not regulated. |
| 14.2 UN proper shipping name | - | - | - | - |
| 14.3 Transport hazard class(es) | - | - | - | - |
| 14.4 Packing group | - | - | - | - |
| 14.5 Environmental hazards | No. | No. | No. | No. |
| Additional information | - | - | - | - |

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SECTION 14: Transport information

14.6 Special precautions for

Not available.

user

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code Not available.

SECTION 15: Regulatory information

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

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

Toxic to reproduction

| Ingredient name | Status | Reference number |
|--------------------------------|-------------|------------------|
| Disodium tetraborate anhydrous | Recommended | ED/30/2010 |

Other regulations

REACH Status The company, as identified in Section 1, sells this product in the EU in compliance with the

current requirements of REACH.

United States inventory

(TSCA 8b)

Not determined.

Australia inventory (AICS)

China inventory (IECSC)

Japan inventory (ENCS)

All components are listed or exempted. All components are listed or exempted. All components are listed or exempted. All components are listed or exempted.

Korea inventory (KECI) Philippines inventory

Canada inventory

All components are listed or exempted. All components are listed or exempted.

(PICCS)

Taiwan Chemical Substances Inventory

(TCSI)

All components are listed or exempted.

Ozone depleting substances (1005/2009/EU)

Not listed.

Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

Seveso Directive

This product is not controlled under the Seveso Directive.

Product registration

15.2 Chemical safety

number

assessment

A Chemical Safety Assessment has been carried out for one or more of substances within this

mixture. A Chemical Safety Assessment has not been carried out for the mixture itself.

SECTION 16: Other information

Abbreviations and acronyms

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway

ADR = The European Agreement concerning the International Carriage of Dangerous Goods by

Road

4037645

ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor CAS = Chemical Abstracts Service

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]

CSA = Chemical Safety Assessment CSR = Chemical Safety Report DMEL = Derived Minimal Effect Level DNEL = Derived No Effect Level

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SECTION 16: Other information

EINECS = European Inventory of Existing Commercial chemical Substances

ES = Exposure Scenario

EUH statement = CLP-specific Hazard statement

EWC = European Waste Catalogue

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as

modified by the Protocol of 1978. ("Marpol" = marine pollution)
OECD = Organisation for Economic Co-operation and Development

PBT = Persistent, Bioaccumulative and Toxic PNEC = Predicted No Effect Concentration

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

RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail

RRN = REACH Registration Number

SADT = Self-Accelerating Decomposition Temperature

SVHC = Substances of Very High Concern

STOT-RE = Specific Target Organ Toxicity - Repeated Exposure STOT-SE = Specific Target Organ Toxicity - Single Exposure

TWA = Time weighted average

UN = United Nations

UVCB = Complex hydrocarbon substance

VOC = Volatile Organic Compound

vPvB = Very Persistent and Very Bioaccumulative

Varies = may contain one or more of the following 64741-88-4 / RRN 01-2119488706-23, 64741-89-5 / RRN 01-2119487067-30, 64741-95-3 / RRN 01-2119487081-40, 64741-96-4/ RRN

01-2119483621-38, 64742-01-4 / RRN 01-2119488707-21, 64742-44-5 / RRN

01-2119985177-24, 64742-45-6, 64742-52-5 / RRN 01-2119467170-45, 64742-53-6 / RRN

01-2119480375-34, 64742-54-7 / RRN 01-2119484627-25, 64742-55-8 / RRN 01-2119487077-29, 64742-56-9 / RRN 01-2119480132-48, 64742-57-0 / RRN 01-2119489287-22, 64742-58-1, 64742-62-7 / RRN 01-2119480472-38, 64742-63-8, 64742-65-0 / RRN 01-2119471299-27, 64742-70-7 / RRN 01-2119487080-42, 72623-85-9 / RRN 01-2119555262-43, 72623-86-0 / RRN 01-2119474878-16, 72623-87-1 / RRN

01-2119474889-13

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

| Classification Justificati Aquatic Chronic 3, H412 Calculation method | | Justification | |
|--|---|---|--|
| | | Calculation method | |
| Full text of abbreviated H statements | H302 H319 H332 H360FD (oral) H400 H410 | Harmful if swallowed. Causes serious eye irritation. Harmful if inhaled. May damage fertility if swallowed. May damage the unborn child if swallowed. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects. | |
| Full text of classifications [CLP/GHS] | Acute Tox. 4, H302 Acute Tox. 4, H332 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 Eye Irrit. 2, H319 Repr. 1B, H360FD (oral) | ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (inhalation) - Category 4 SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2 REPRODUCTIVE TOXICITY (Fertility and Unborn child) (oral) - Category 1B | |
| <u>History</u> | | | |
| Date of issue/ Date of revision | 07/06/2019. | | |
| Date of previous issue | No previous validation. | | |

▼ Indicates information that has changed from previously issued version.

Product Stewardship

Notice to reader

Prepared by

Product nameSyntilo 9954Product code458285-FR01Page: 11/19Version 1Date of issue 7 June 2019FormatSouth AfricaLanguageENGLISH(South Africa)

SECTION 16: Other information

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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Annex to the extended Safety Data Sheet (eSDS)

Industrial

Identification of the substance or mixture

Product definition Mixture

Code 458285-FR01

Product name Syntilo 9954

Section 1: Title

Short title of the exposure

scenario

Handling and dilution of metal working fluid concentrates - Industrial

List of use descriptors Ide

Identified use name: Handling and dilution of metal working fluid concentrates-

Industria

Process Category: PROC01, PROC02, PROC08b, PROC05

Sector of end use: SU03

Subsequent service life relevant for that use: No.

Environmental Release Category: ERC02

Specific Environmental Release Category: ATIEL-ATC SPERC 2.Ei.v1

Processes and activities covered by the exposure

scenario

Handling and dilution of metal working fluid concentrates. Includes associated product storage, material transfers, sampling and maintenance activities.

Section 2 Operational conditions and risk management measures

Section 2.1 Control of worker exposure

No exposure scenario is presented because the product is not classified for Human Health

Contributing scenarios: Operational conditions and risk management measures

Section 2.2: Control of environmental exposure

Amounts used:

EU tonnage of risk determining substance 3.02E+02 Tonnes/year

per year:

Frequency and duration of use:

Emission days 300

Environment factors not influenced by risk

management:

Local freshwater dilution factor 10

Local marine water dilution factor 100

Other conditions affecting environmental

exposure:

Water-based (oil in water emulsion) or straight oil (contains no water)

process

Release fraction to air (after typical onsite

RMMs)

5.00E-05

Release fraction to soil from process (after

typical onsite RMMs)

Release fraction to wastewater from process No data available yet

(after typical onsite RMMs and before

sewage treatment plan)

Technical conditions and measures at Common practices vary across sites thus conservative process

process level (source) to prevent release: release estimates used.

Handling and dilution of metal working fluid concentrates - Industrial

Syntilo 9954

Technical on-site conditions and measures to reduce or limit discharges, air emissions and releases to soil:

Organisational measures to prevent/limit release from site:

Conditions and measures related to sewage treatment plant:

Estimated substance removal from wastewater via on-site sewage treatment

Assumed domestic sewage treatment plant flow rate (m3/d)

Maximum allowable site tonnage (Msafe) based on release following total wastewater treatment removal as product:

Conditions and measures related to external treatment of waste for disposal:

Conditions and measures related to external recovery of waste:

Prevent discharge of undissolved substance to or recover from onsite wastewater.

User sites are assumed to be provided with oil/water separators and waste water to be discharged via a sewage treatment plant

Do not apply industrial sludge to natural soils.

Sewage sludge should be incinerated, contained or reclaimed.

No data available yet

2.00E+3

No data available yet

External treatment and disposal of waste should comply with applicable local and/or national regulations.

External recovery and recycling of waste should comply with applicable local and/or national regulations.

Section 3: Exposure estimation and reference to its source

Exposure estimation and reference to its source - Environment

Exposure assessment (environment): Used ECETOC TRA model (May 2010 release).

Exposure estimation and reference to its source - Workers

Exposure assessment (human):No exposure scenario is presented because the product is not

classified for Human Health

Section 4: Guidance to check compliance with the exposure scenario

| Environment | Guidance is based on assumed operating conditions which may not be applicable to all sites; thus, scaling may be necessary to define appropriate site-specific risk management measures. Further details on scaling and control technologies are provided in SPERC factsheet. If scaling reveals a condition of unsafe use (i.e., RCRs > 1), additional RMMs or a site-specific chemical safety assessment is |
|-------------|---|
| Health | required. For further information see www.ATIEL.org/REACH_GES Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels. |



Annex to the extended Safety Data Sheet (eSDS)

Industrial

Identification of the substance or mixture

Product definition Mixture Code 458285-FR01 **Product name** Syntilo 9954

Section 1: Title

Short title of the exposure

scenario

Use of lubricants in high energy open processes - Industrial

Identified use name: Use of lubricants in high energy open processes-Industrial List of use descriptors

Process Category: PROC01, PROC02, PROC08b, PROC17

Sector of end use: SU03

Subsequent service life relevant for that use: No. **Environmental Release Category: ERC04**

Specific Environmental Release Category: ATIEL-ATC SPERC 4.Fi.v1

Processes and activities covered by the exposure

scenario

Covers use of lubricants in high energy open processes, e.g. In high speed machinery such as metal rolling/forming or metal working fluids for machining and grinding. Includes associated product storage, material transfers, sampling and

maintenance activities.

Section 2 Operational conditions and risk management measures

Section 2.1 Control of worker exposure

No exposure scenario is presented because the product is not classified for Human Health

Contributing scenarios: Operational conditions and risk management measures

Section 2.2: Control of environmental exposure

Amounts used:

EU tonnage of risk determining substance 2.05E+02 Tonnes/year

per year:

Frequency and duration of use:

Emission days 300

Environment factors not influenced by risk

management:

10 Local freshwater dilution factor Local marine water dilution factor

Other conditions affecting environmental

exposure:

Water-based (oil in water emulsion) or straight oil (contains no water)

process

Release fraction to air (after typical onsite

RMMs)

Syntilo 9954

1.00E-04

Release fraction to soil from process (after

typical onsite RMMs)

Release fraction to wastewater from process No data available vet

(after typical onsite RMMs and before

sewage treatment plan)

Technical conditions and measures at Common practices vary across sites thus conservative process

process level (source) to prevent release: release estimates used.

Use of lubricants in high energy open processes -

Industrial

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Technical on-site conditions and measures to reduce or limit discharges, air emissions and releases to soil:

Prevent discharge of undissolved substance to or recover from onsite wastewater.

User sites are assumed to be provided with oil/water separators and waste water to be discharged via a sewage treatment plant

Do not apply industrial sludge to natural soils. Organisational measures to prevent/limit Sewage sludge should be incinerated, contained or reclaimed. release from site:

Conditions and measures related to sewage

treatment plant:

Estimated substance removal from wastewater via on-site sewage treatment

Assumed domestic sewage treatment plant flow rate (m3/d)

Maximum allowable site tonnage (Msafe) based on release following total wastewater treatment removal as product:

Conditions and measures related to external treatment of waste for disposal:

Conditions and measures related to external recovery of waste:

No data available yet

2.00E+3

No data available yet

External treatment and disposal of waste should comply with applicable local and/or national regulations.

External recovery and recycling of waste should comply with applicable local and/or national regulations.

Section 3: Exposure estimation and reference to its source

Exposure estimation and reference to its source - Environment

Exposure assessment (environment): Used ECETOC TRA model (May 2010 release).

Exposure estimation and reference to its source - Workers

Exposure assessment (human): No exposure scenario is presented because the product is not

classified for Human Health

Section 4: Guidance to check compliance with the exposure scenario

| Environment | Guidance is based on assumed operating conditions which may not be applicable to all sites; thus, scaling may be necessary to define appropriate site-specific risk management measures. Further details on scaling and control technologies are provided in SPERC factsheet. If scaling reveals a condition of unsafe use (i.e., RCRs > 1), additional RMMs or a site-specific chemical safety assessment is required. For further information see www.ATIEL.org/REACH_GES |
|-------------|---|
| Health | Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels. |



Annex to the extended Safety Data Sheet (eSDS)

Professional

Identification of the substance or mixture

Product definition Mixture Code 458285-FR01 **Product name** Syntilo 9954

Section 1: Title

Short title of the exposure

scenario

Use of lubricants in high energy open processes - Professional

Identified use name: Use of lubricants in high energy open processes-Professional List of use descriptors

Process Category: PROC01, PROC02, PROC08a, PROC17

Sector of end use: SU22

Subsequent service life relevant for that use: No. Environmental Release Category: ERC08a

Specific Environmental Release Category: ATIEL-ATC SpERC 8.7c.v1

Processes and activities covered by the exposure

scenario

Covers use of lubricants in high energy open processes, e.g. In high speed machinery such as metal rolling/forming or metal working fluids for machining and grinding. Includes associated product storage, material transfers, sampling and

maintenance activities.

Section 2 Operational conditions and risk management measures

Section 2.1 Control of worker exposure

No exposure scenario is presented because the product is not classified for Human Health

Contributing scenarios: Operational conditions and risk management measures

Section 2.2: Control of environmental exposure

Amounts used:

EU tonnage of risk determining substance 2.05E+02 Tonnes/year

per year:

Frequency and duration of use:

Emission days 365

Environment factors not influenced by risk

management:

10 Local freshwater dilution factor Local marine water dilution factor

Other conditions affecting environmental

exposure:

Negligible wastewater emissions as process operates without water

contact.

Release fraction to air (after typical onsite

RMMs)

1.00E-04

Release fraction to soil from process (after

typical onsite RMMs)

1E-03

Release fraction to wastewater from process No data available vet

(after typical onsite RMMs and before

sewage treatment plan)

Technical conditions and measures at Common practices vary across sites thus conservative process

process level (source) to prevent release: release estimates used.

Use of lubricants in high energy open processes -

Professional

Technical on-site conditions and measures to reduce or limit discharges, air emissions and releases to soil:

Prevent discharge of undissolved substance to or recover from onsite wastewater. User sites are assumed to be provided with oil/water separators and waste water to be discharged via a sewage treatment

Organisational measures to prevent/limit release from site:

Do not apply industrial sludge to natural soils.

Sewage sludge should be incinerated, contained or reclaimed.

Conditions and measures related to sewage treatment plant:

Estimated substance removal from wastewater via on-site sewage treatment No data available yet

Assumed domestic sewage treatment plant flow rate (m3/d)

2.00E+3

Maximum allowable site tonnage (Msafe) based on release following total wastewater

No data available

treatment removal as product: Conditions and measures related to external

External treatment and disposal of waste should comply with applicable local and/or national regulations.

treatment of waste for disposal: Conditions and measures related to external

External recovery and recycling of waste should comply with applicable local and/or national regulations.

recovery of waste:

Section 3: Exposure estimation and reference to its source

Exposure estimation and reference to its source - Environment

Exposure assessment (environment): Used ECETOC TRA model (May 2010 release).

Exposure estimation and reference to its source - Workers

Exposure assessment (human): No exposure scenario is presented because the product is not

classified for Human Health

Section 4: Guidance to check compliance with the exposure scenario

| Environme | Guidance is based on assumed operating conditions which may not be applicable to all sites; thus, scaling may be necessary to define appropriate site-specific risk management measures. Further details on scaling and control technologies are provided in SPERC factsheet. If scaling reveals a condition of unsafe use (i.e., RCRs > 1), additional RMMs or a site-specific chemical safety assessment is required. For further information see www.ATIEL.org/REACH_GES |
|-----------|---|
| Health | Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels. |



Product nameSyntilo 9954Product code458285-FR01Page: 19/19Version 1Date of issue 7 June 2019FormatSouth AfricaLanguageENGLISH(South Africa)