

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

Product name	Rustilo DW 902
SDS no.	458580
Use of the substance/mixture	Rust preventive / Water displacement fluid For specific application advice see appropriate Technical Data Sheet or consult our company representative.
Supplier	Castrol India Ltd Technopolis Knowledge Park Office PO Box 19411 Mahakali Caves Rd Chakala, Andheri (E) Mumbai 400093 Telephone: +91 (022) 66984111/66984112
EMERGENCY TELEPHONE NUMBER	Toll free: 000800 100 7479 (for use in India only - 24 hours) Carechem Singapore: +65 3158 1198 (24 hours)
E-mail address	MSDSadvice@bp.com

2 . Hazards identification

This preparation is classified as dangerous according to Directive 1999/45/EC as amended and adapted.

Physical/chemical hazards	Flammable.
Human health hazards	Harmful by inhalation, in contact with skin and if swallowed. Harmful: may cause lung damage if swallowed. Irritating to eyes and skin. May cause sensitisation by skin contact.
Environmental hazards	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Additional hazards	Defatting to the skin.

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

3 . Composition/information on ingredients

Hydrocarbon solvent, film forming corrosion preventives and additives

Chemical name	CAS no.	%	EINECS / ELINCS.	Classification
turpentine, oil	8006-64-2	50 - 100	232-350-7	R10 Xn; R20/21/22, R65 Xi; R36/38 R43 N; R51/53
Ethylene glycol monobutyl ether	111-76-2	1 - 5	203-905-0	Xn; R20/21/22 Xi; R36/37

See Section 16 for the full text of the R-phrases 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

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

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	Wash skin thoroughly with soap and water or use recognised skin cleanser. Drench contaminated clothing with water before removing. This is necessary to avoid the risk of sparks from static electricity that could ignite contaminated clothing. Contaminated clothing is a fire hazard. Contaminated leather, particularly footwear, must be discarded. Remove contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. In the event of any complaints or symptoms, avoid further exposure. Get medical attention.

Inhalation	If inhaled, remove to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Get medical attention.
Ingestion	Do not induce vomiting. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Aspiration hazard if swallowed. Can enter lungs and cause damage. Get medical attention.
Notes to physician	Treatment should in general be symptomatic and directed to relieving any effects. Aspiration of this material into the lungs may cause chemical pneumonia and can be fatal. Aspiration into the lungs can occur while vomiting after ingestion of this material.

5 . Fire-fighting measures

Extinguishing media	
Suitable	Use foam or all-purpose dry chemical to extinguish.
Not suitable	Do not use water jet.
Hazardous decomposition products	Combustion products may include the following: carbon dioxide carbon monoxide
Unusual fire/explosion hazards	Flammable liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard.
Special fire-fighting procedures	DO NOT FIGHT FIRE WHEN IT REACHES MATERIAL. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain. First move people out of line-of-sight of the scene and away from windows. Move containers from fire area if this can be done without risk. 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 toxic to aquatic organisms. Use water spray to keep fire-exposed containers cool. Withdraw from fire and let it burn.
Protection of fire-fighters	Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear. Fire-fighters' protective clothing will only provide limited protection.

6 . Accidental release measures

Personal precautions - For non-emergency personnel	Eliminate all ignition sources. Immediately 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. No flares, smoking or flames in hazard area. Do not breathe vapour or mist. Ensure good ventilation. Put on appropriate personal protective equipment.
Personal precautions - 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".
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.
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. Use spark-proof tools and explosion-proof equipment. Contaminated absorbent material may pose the same hazard as the spilt product. The method and equipment used must be in conformance with appropriate regulations and industry practice on explosive atmospheres. Dispose of via a licensed waste disposal contractor.
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. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. The method and equipment used must be in conformance with appropriate regulations and industry practice on explosive atmospheres.
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.

7 . Handling and storage

Handling - Protective measures	Put on appropriate personal protective equipment. Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not swallow. Never siphon by mouth. Avoid breathing vapour or mist. Avoid contact of spilt material and runoff with soil and surface waterways. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by earthing and bonding containers and equipment before transferring material. Do not reuse container. Empty containers retain product residue and can be hazardous. Concentrations of mist, fumes and vapours in enclosed spaces may result in the formation of explosive atmospheres. Excessive splashing, agitation or heating must be avoided. During metal working, solid particles from workpieces or tools will
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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. Keep away from ignition sources such as heat/sparks/open flame. - No smoking. Aspiration hazard if swallowed. Can enter lungs and cause damage. Avoid prolonged contact with eyes, skin and clothing.

Handling - 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.

Storage

Eliminate all ignition sources. 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. Do not store in unlabelled containers. Separate from oxidising materials. Store in accordance with local regulations. Store in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Store in a segregated and approved area. Use appropriate containment to avoid environmental contamination.

8 . Exposure controls/personal protection

Ingredient name

turpentine, oil

Occupational exposure limits

ACGIH TLV (United States). Skin sensitizer.

TWA: 20 ppm 8 hours. Issued/Revised: 1/2003

Ethylene glycol monobutyl ether

EU OEL (Europe). Absorbed through skin.

TWA: 20 ppm 8 hours. Issued/Revised: 6/2000

TWA: 98 mg/m³ 8 hours. Issued/Revised: 6/2000

STEL: 50 ppm 15 minutes. Issued/Revised: 6/2000

STEL: 246 mg/m³ 15 minutes. Issued/Revised: 6/2000

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.

Exposure controls

Occupational exposure controls

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapours 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.

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.

Personal protective equipment

Respiratory protection

Use with adequate ventilation.

In case of insufficient ventilation, wear suitable respiratory equipment.

Recommended: half-face mask - organic vapor filter (Type A).

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.

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.

Wear suitable gloves.

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.

Eye protection

Skin and body

Safety glasses with side shields.

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.

Wear clothing and footwear that cannot be penetrated by chemicals or oil.

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.

Personal protective equipment (Pictograms)



9 . Physical and chemical properties

General information

Appearance

Physical state

Liquid.

Colour

Amber. [Light]

Important health, safety and environmental information

Flash point

Open cup: 42°C (107.6°F) [Cleveland.]

Viscosity

Kinematic: 2.9 mm²/s (2.9 cSt) at 40°C

Density

<1000 kg/m³ (<1 g/cm³) at 29.5°C

Solubility

insoluble in water.

10 . Stability and reactivity

Stability

The product is stable.

Possibility of hazardous reactions

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

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

Conditions to avoid

High temperatures. Keep away from sources of ignition.

Materials to avoid

Reactive or incompatible with the following materials: oxidising materials.

Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11 . Toxicological information

Acute toxicity

Effects and symptoms

Eyes	Irritating to eyes.
Skin	Harmful in contact with skin. Irritating to skin. May cause sensitisation by skin contact. May cause skin dryness and irritation.
Inhalation	Harmful by inhalation. May be harmful by inhalation if exposure to vapour, mists or fumes resulting from thermal decomposition products occurs. Exposure to high concentrations can cause dizziness, lightheadedness, headache, nausea and blurred vision. Higher levels may cause unconsciousness.
Ingestion	Harmful if swallowed. Aspiration hazard if swallowed -- harmful or fatal if liquid is aspirated into lungs.
Chronic effects	Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

12 . Ecological information

Persistence/degradability	Not expected to be rapidly degradable.
Mobility	Volatile. Liquid. insoluble in water.
Bioaccumulative potential	This product may bioaccumulate through food chains in the environment.
Environmental hazards	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

13 . Disposal considerations

Disposal considerations / Waste information	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.
Special precautions	Vapour from product residues may create a highly flammable or explosive atmosphere inside the container. Empty containers represent a fire hazard as they may contain flammable product residues and vapour. Never weld, solder or braze empty containers.

Unused product

Waste code	Waste designation
14 06 03*	other solvents and solvent mixtures





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

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

14 . Transport information

International transport regulations

Regulatory information	UN number	Proper shipping name	Class	PG*	Label	Additional information
ADR/RID Classification	UN1300	Turpentine substitute mixture	3	III	 	The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg. Hazard identification number 30 Tunnel code D/E
ADN Classification	UN1300	Turpentine substitute mixture	3	III	 	The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg.

Regulatory information	UN number	Proper shipping name	Class	PG*	Label	Additional information
IMDG Classification	UN1300	Turpentine substitute mixture. Marine pollutant (turpentine, oil)	3	III		The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg. Emergency schedules (EmS) F-E, S-E
ICAO/IATA Classification	UN1300	Turpentine substitute	3	III		The environmentally hazardous substance mark may appear if required by other transportation regulations.

PG* : Packing group

ADR/RID Classification code: F1

ADN Classification code: F1

15 . Regulatory information

Label requirements

Indication of danger

Risk phrases

R10- Flammable.
R20/21/22- Harmful by inhalation, in contact with skin and if swallowed.
R65- Harmful: may cause lung damage if swallowed.
R36/38- Irritating to eyes and skin.
R43- May cause sensitisation by skin contact.
R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety phrases

S23- Do not breathe vapour or mist.
S28- After contact with skin, wash immediately with plenty of soap and water.
S36/37/39- Wear suitable protective clothing, gloves and eye/face protection.
S43- In case of fire, use water fog, foam, dry chemical or carbon dioxide extinguisher or spray.
S61- Avoid release to the environment. Refer to special instructions/safety data sheet.
S62- If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

Contains

turpentine, oil

Other regulations

REACH Status

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

United States inventory (TSCA 8b)

At least one component is not listed.

Australia inventory (AICS)

At least one component is not listed.

Canada inventory

At least one component is not listed.

China inventory (IECSC)

At least one component is not listed.

Japan inventory (ENCS)

At least one component is not listed.

Korea inventory (KECI)

At least one component is not listed.

Philippines inventory (PICCS)

At least one component is not listed.

Taiwan inventory (CSNN)

Not determined.



Harmful



Dangerous for the environment

16 . Other information

Full text of R-phrases referred to in sections 2 and 3

R10- Flammable.
R20/21/22- Harmful by inhalation, in contact with skin and if swallowed.
R65- Harmful: may cause lung damage if swallowed.
R36/37- Irritating to eyes and respiratory system.
R36/38- Irritating to eyes and skin.
R43- May cause sensitisation by skin contact.
R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

History

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27/03/2015.

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Prepared by

Product Stewardship

Notice to reader

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