SAFETY DATA SHEET



Identification of the substance/preparation and company/undertaking

Product name llocut 334

453612 SDS no.

Use of the substance/mixture Metalworking fluid - neat.

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

Hazards identification

This preparation is not classified as dangerous according to Directive 1999/45/EC as amended and adapted.

Additional hazards Defatting to the skin.

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

Composition/information on ingredients

Highly refined mineral oil and additives.

Chemical name EINECS / Classification CAS no. ELINCS.

Sas oil - unspecified 64742-46-7 50 - 100 265-148-2 Not classified. [1] [2]

See Section 16 for the full text of the R-phrases declared above.

Type

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.

First-aid measures

Eye contact rcase 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

Wash skin thoroughly with soap and water or use recognised skin cleanser. Remove contaminated Skin contact

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. Get medical attention if symptoms appear.

Ingestion Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms

Notes to physician Treatment should in general be symptomatic and directed to relieving any effects

5. Fire-fighting measures

Extinguishing media

Suitable In case of fire, use foam, dry chemical or carbon dioxide extinguisher or spray.

Do not use water jet. Not suitable

Hazardous decomposition

Decomposition products may include the following materials:

products

carbon dioxide carbon monoxide sulfur oxides

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(India) (ENGLISH) Unusual fire/explosion hazards

In a fire or if heated, a pressure increase will occur and the container may burst. Swarf fires - Neat metal working oils may fume, thermally decompose or ignite if they come into contact with red hot swarf. To minimise the generation of red hot swarf ensure that a sufficient flow of oil is correctly directed to the cutting edge of the tool to flood it throughout cutting operations. As an additional precaution swarf should be regularly cleared from the immediate area to prevent the risk of fire.

Special fire-fighting procedures

Protection of 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.

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 fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

Accidental release measures 6.

Personal precautions - For non-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. Put on appropriate personal protective

Personal precautions - For emergency responders

If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. 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).

Large spill

Immediately contact emergency personnel. Stop leak if without risk. Move containers from spill area. 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. 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. Dispose of via a licensed waste disposal contractor.

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.

Handling and storage

Handling - Protective measures

Put on appropriate personal protective equipment. 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 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, as can bacteria, and as a result may induce allergic and other skin reactions, especially if personal hygiene is inadequate.

Handling - Advice on general

occupational hygiene

Storage

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.

Store and use only in equipment/containers designed for use with this product. 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. Store in accordance with local regulations. Store in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10).

Exposure controls/personal protection

Ingredient name

Occupational exposure limits

as oil - unspecified

ACGIH (United States). TWA: 5 mg/m³ 8 hours. Form: Oil mist, mineral

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.

Exposure controls

Occupational exposure controls

Frovide 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.

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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.

Personal protective equipment

Respiratory protection

Respiratory protective equipment is not normally required where there is adequate natural or local

exhaust ventilation to control exposure.

In case of insufficient ventilation, wear suitable respiratory equipment.

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

Wear protective gloves if prolonged or repeated contact is likely.

Wear chemical resistant gloves. 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.

Eye protection

Safety glasses with side shields.

Skin and body Se 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.

Personal protective equipment (Pictograms)



9. Physical and chemical properties

General information

Appearance

Physical state Liquid.
Colour Yellow.
Odour Mild.

Important health, safety and environmental information

Flash point pen cup: >160°C (>320°F) [Cleveland.]

Auto-ignition temperature >250°C (>482°F)
Explosion limits Lower: 0.6%
Upper: 6%

Viscosity Vinematic: 15 mm²/s (15 cSt) at 40°C

Boiling point / range >250°C (>482°F)

Solubility insoluble in water.

10 . Stability and reactivity

Stability The product is stable.

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

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

Conditions to avoid Avoid excessive heat.

Materials to avoid Reactive or incompatible with the following materials: oxidising materials.

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

products

11. Toxicological information

Acute toxicity

Effects and symptoms

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

Skin May cause skin dryness and irritation.

Inhalation Vapour inhalation under ambient conditions is not normally a problem due to low vapour pressure.

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

Chronic effects Folonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

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12. Ecological information

Persistence/degradability Expected to be biodegradable.

Mobility Non-volatile. Liquid. insoluble in water.

Environmental hazards Not classified as dangerous.

13. Disposal considerations

Disposal considerations / Waste information

The generation of waste should be avoided or minimised wherever possible. Waste product residues should not be disposed of via the sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. 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. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

Unused product

Waste code	Waste designation
1 2 01 07*	mineral-based machining oils free of halogens (except emulsions and solutions)

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)
1 5 01 10*	packaging containing residues of or contaminated by dangerous substances

14. Transport information

Not classified as hazardous for transport (ADR/RID, ADNR, IMDG, ICAO/IATA)

15. Regulatory information

Classification and labelling have been performed according to EU directives 1999/45/EC and 67/548/EEC as amended and adapted. **Label requirements**

Risk phrases This product is not classified according to EU legislation.

Other regulations

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

United States inventory Not determined.

(TSCA 8b)

Australia inventory (AICS)

Canada inventory

China inventory (IECSC)

Japan inventory (ENCS)

Korea inventory (KECI)

Philippines inventory

(PICCS)

Not determined.

Not determined.

Not determined.

16. Other information

History

Date of issue/ Date of 02/07/2013.

revision

Date of previous issue 20/05/2011.

Prepared by Product Stewardship

Notice to reader

✓ Indicates information that has changed from previously issued version.

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