

# SAFETY DATA SHEET



Castrol RX J-Max 15W-40

## Section 1. Identification

**GHS product identifier** Castrol RX J-Max 15W-40

**Product code** 468111-AU22

**SDS no.** 468111

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

**Use of the substance/  
mixture** Engine Oils.  
For specific application advice see appropriate Technical Data Sheet or consult our company representative.

### **Manufacturer**

**Supplier** Castrol Australia Pty Ltd  
Level 17, 717 Bourke Street  
Docklands, Victoria 3008  
ABN 87 008 459 407  
www.castrol.com.au

Tel: +61 (03) 9268 4111

Fax: +61 (03) 9268 3321

**EMERGENCY TELEPHONE  
NUMBER** +61 2801 44558 (or 1800 14 14 74 within Australia)

**OTHER PRODUCT  
INFORMATION** Technical Advice Helpline Number: 1300 557 998

## Section 2. Hazard(s) identification

**Classification of the  
substance or mixture** Not classified.

### GHS label elements

**Signal word** No signal word.

**Hazard statements** No known significant effects or critical hazards.

### Precautionary statements

**General** P103 - Read label before use.  
P102 - Keep out of reach of children.  
P101 - If medical advice is needed, have product container or label at hand.

**Prevention** Not applicable.

**Response** Not applicable.

**Storage** Not applicable.

**Disposal** Not applicable.

**Supplemental label  
elements** Not applicable.

**Other hazards which do not  
result in classification** Defatting to the skin.  
USED ENGINE OILS  
Used engine oil may contain hazardous components which have the potential to cause skin cancer.  
See Toxicological Information, section 11 of this Safety Data Sheet.

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## Section 3. Composition and ingredient information

**Substance/mixture** Mixture

Highly refined base oil (IP 346 DMSO extract < 3%). Proprietary performance additives.

Ingredient name	% (w/w)	CAS number
Base oil - unspecified	≥75 - <90	Varies - See Key to abbreviations
Base oil - unspecified	≥5 - <10	Varies - See Key to abbreviations

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

### Description of necessary first aid measures

<b>Eye contact</b>	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.
<b>Inhalation</b>	If inhaled, remove to fresh air. Get medical attention if symptoms occur.
<b>Skin contact</b>	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 symptoms occur.
<b>Ingestion</b>	Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

### Most important symptoms/effects, acute and delayed

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

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

<b>Notes to physician</b>	Treatment should in general be symptomatic and directed to relieving any effects.
<b>Specific treatments</b>	No specific treatment.
<b>Protection of first-aiders</b>	No action shall be taken involving any personal risk or without suitable training.

## Section 5. Fire-fighting measures

### Extinguishing media

<b>Suitable extinguishing media</b>	In case of fire, use foam, dry chemical or carbon dioxide extinguisher or spray.
<b>Unsuitable extinguishing media</b>	Do not use water jet.

### Specific hazards arising from the chemical

<b>Hazardous thermal decomposition products</b>	In a fire or if heated, a pressure increase will occur and the container may burst.  Combustion products may include the following: carbon dioxide carbon monoxide
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### Special protective actions for fire-fighters

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

### Special protective equipment for fire-fighters

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

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## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

#### **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. Put on appropriate personal protective equipment. Floors may be slippery; use care to avoid falling.

#### **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).

### 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. 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.

## Section 7. Handling and storage

### Precautions for safe handling

#### **Protective measures**

Put on appropriate personal protective equipment (see Section 8).

#### **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.

#### **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 and personal protection

### Control parameters

#### Occupational exposure limits

<b>Ingredient name</b>	<b>Exposure limits</b>
Base oil - unspecified	<b>Safe Work Australia (Australia).</b> TWA: 5 mg/m <sup>3</sup> 8 hours. Form: Oil mist, mineral
Base oil - unspecified	<b>Safe Work Australia (Australia).</b> TWA: 5 mg/m <sup>3</sup> 8 hours. Form: Oil mist, mineral



## Section 8. Exposure controls and 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.

### 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. 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.

#### Eye/face protection

Safety glasses with side shields.

#### Skin protection

##### 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.

##### Skin protection

Use of protective clothing is good industrial practice.

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 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.

##### Other skin protection

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

##### Respiratory protection

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.

### Refer to standards:

Respiratory protection: AS/NZS 1715 and AS/NZS 1716

Gloves: AS/NZS 2161.1

Eye protection: AS/NZS 1336 and AS/NZS 1337



## Section 9. Physical and chemical properties

### Appearance

Physical state	Liquid.
Colour	Amber.
Odour	Mild.
Odour threshold	Not available.
pH	Not available.
Melting point	Not available.
Boiling point	Not available.
Flash point	Closed cup: 204°C (399.2°F) [Pensky-Martens.] [Product does not sustain combustion.]
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable. Based on - Physical state
Lower and upper explosive (flammable) limits	Not available.
Vapour pressure	Not available.
Vapour density	Not available.
Relative density	870 kg/m <sup>3</sup> (0.87 g/cm <sup>3</sup> ) at 15°C
Solubility	insoluble in water.
Partition coefficient: n-octanol/water	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Kinematic: 101 mm <sup>2</sup> /s (101 cSt) at 40°C Kinematic: 14 to 15 mm <sup>2</sup> /s (14 to 15 cSt) at 100°C

## Section 10. Stability and reactivity

Reactivity	No specific test data available for this product. Refer to Conditions to avoid and Incompatible materials for additional information.
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	Avoid all possible sources of ignition (spark or flame).
Incompatible materials	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.

## Section 11. Toxicological information

### Information on toxicological effects

#### Aspiration hazard

##### Name

Base oil - unspecified

##### Result

ASPIRATION HAZARD - Category 1

### Information on the likely routes of exposure

Routes of entry anticipated: Dermal, Inhalation.

### Potential acute health effects

#### Eye contact

No known significant effects or critical hazards.

#### Inhalation

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

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## Section 11. Toxicological information

<b>Skin contact</b>	Defatting to the skin. May cause skin dryness and irritation.
<b>Ingestion</b>	No known significant effects or critical hazards.

### Symptoms related to the physical, chemical and toxicological characteristics

<b>Eye contact</b>	No specific data.
<b>Inhalation</b>	No specific data.
<b>Skin contact</b>	Adverse symptoms may include the following: irritation dryness cracking
<b>Ingestion</b>	No specific data.

### Delayed and immediate effects and also chronic effects from short and long term exposure

<b>Inhalation</b>	Overexposure to the inhalation of airborne droplets or aerosols may cause irritation of the respiratory tract.
<b>General</b>	USED ENGINE OILS Combustion products resulting from the operation of internal combustion engines contaminate engine oils during use. Used engine oil may contain hazardous components which have the potential to cause skin cancer. Frequent or prolonged contact with all types and makes of used engine oil must therefore be avoided and a high standard of personal hygiene maintained.
<b>Carcinogenicity</b>	No known significant effects or critical hazards.
<b>Mutagenicity</b>	No known significant effects or critical hazards.
<b>Teratogenicity</b>	No known significant effects or critical hazards.
<b>Developmental effects</b>	No known significant effects or critical hazards.
<b>Fertility effects</b>	No known significant effects or critical hazards.

## Section 12. Ecological information

### Persistence and degradability

Expected to be biodegradable.

### Bioaccumulative potential

This product is not expected to bioaccumulate through food chains in the environment.

### Mobility in soil

<b>Soil/water partition coefficient (<math>K_{oc}</math>)</b>	Not available.
<b>Mobility</b>	Spillages may penetrate the soil causing ground water contamination.

### Other ecological information

Spills may form a film on water surfaces causing physical damage to organisms. Oxygen transfer could also be impaired.



## Section 13. Disposal considerations

### Disposal methods

The generation of waste should be avoided or minimised wherever possible. Significant quantities of waste product residues should not be disposed of via the foul 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.

### Special Precautions for Landfill or Incineration

No additional special precautions identified.

## Section 14. Transport information

	ADG	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-
Transport hazard class(es)	-	-	-
Packing group	-	-	-
Environmental hazards	No.	No.	No.
Additional information	-	-	-

**Special precautions for user** Not available.

## Section 15. Regulatory information

### Standard Uniform Schedule of Medicine and Poisons

Not scheduled

Consumer products - This product is exempt per Appendix A of the SUSMP.

Industrial Products - Labelling requirements for SUSMP do not apply to a poison that is packed and sold solely for industrial, laboratory or manufacturing use. However, this product is labelled in accordance with NOSHC National Code of Practice for labelling of workplace substances.

### Model Work Health and Safety Regulations - Scheduled Substances

No listed substance

### International lists

#### National inventory

#### REACH Status

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

#### Australia inventory (AICS)

All components are listed or exempted.

#### Canada inventory

All components are listed or exempted.

#### China inventory (IECSC)

All components are listed or exempted.

#### Japan inventory (ENCS)

All components are listed or exempted.

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## Section 15. Regulatory information

<b>Korea inventory (KECI)</b>	All components are listed or exempted.
<b>Philippines inventory (PICCS)</b>	At least one component is not listed.
<b>Taiwan inventory (CSNN)</b>	Not determined.
<b>United States inventory (TSCA 8b)</b>	All components are listed or exempted.

## Section 16. Any other relevant information

### History

<b>Date of printing</b>	24/02/2016
<b>Date of issue/Date of revision</b>	24/02/2016
<b>Date of previous issue</b>	21/01/2016
<b>Version</b>	1.01

Product Stewardship

### Key to abbreviations

ADG = Australian Dangerous Goods  
ATE = Acute Toxicity Estimate  
BCF = Bioconcentration Factor  
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 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)  
NOHSC = National Occupational Health and Safety Commission  
STEL = Short term exposure limit  
SUSMP = Standard Uniform Schedule of Medicine and Poisons  
UN = United Nations  
TWA = Time weighted average  
VOC = Volatile Organic Compound  
SADT = Self-Accelerating Decomposition Temperature  
Varies = may contain one or more of the following 101316-69-2, 101316-70-5, 101316-71-6, 101316-72-7, 64741-88-4, 64741-89-5, 64741-95-3, 64741-96-4, 64741-97-5, 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, 64742-64-9, 64742-65-0, 64742-70-7, 72623-85-9, 72623-86-0, 72623-87-1, 74869-22-0, 90669-74-2

### Procedure used to derive the classification

Classification	Justification
Not classified.	

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.

It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. The BP Group shall not be responsible for any damage or injury resulting from use, other than the stated product use of the material, from any failure to adhere to recommendations, or from any hazards inherent in the nature of the material. Purchasers of the product for supply to a third party for use at work, have a duty to take all necessary steps to

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				(ENGLISH)	



## Section 16. Any other relevant information

ensure that any person handling or using the product is provided with the information in this sheet. Employers have a duty to tell employees and others who may be affected of any hazards described in this sheet and of any precautions that should be taken. You can contact the BP Group to ensure that this document is the most current available. Alteration of this document is strictly prohibited.





## ADBLUE

Chemwatch Independent Material Safety Data Sheet

Issue Date: 6-Sep-2012

A317LP

CHEMWATCH 4696-32

Version No:3.1.1.1

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### Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

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#### PRODUCT NAME

AdBlue

#### PRODUCT USE

■ Used according to manufacturer's directions.

Used for NOx reduction in exhaust gases from vehicles with diesel engines.

#### SUPPLIER

Company: AUSblue Pty Ltd

Address:

P.O. Box 5386

Brassall

QLD 4306

Australia

Telephone: 1300 AUS BLUE (1300 287 258)

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### Section 2 - HAZARDS IDENTIFICATION

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#### STATEMENT OF HAZARDOUS NATURE

NON-HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS. According to NOHSC Criteria, and ADG Code.

#### RISK

•None under normal operating conditions.

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### Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

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NAME	CAS RN	%
urea	57-13-6	30-40
water	7732-18-5	>60

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### Section 4 - FIRST AID MEASURES

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#### SWALLOWED

- Immediately give a glass of water.
- First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

continued...



# ADBLUE

## Chemwatch Independent Material Safety Data Sheet

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## Section 4 - FIRST AID MEASURES

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### EYE

- If this product comes in contact with eyes:
  - Wash out immediately with water.
  - If irritation continues, seek medical attention.
  - Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

### SKIN

- If skin contact occurs:
  - Immediately remove all contaminated clothing, including footwear.
  - Flush skin and hair with running water (and soap if available).
  - Seek medical attention in event of irritation.

### INHALED

- If fumes, aerosols or combustion products are inhaled remove from contaminated area.
- Other measures are usually unnecessary.

### NOTES TO PHYSICIAN

- Treat symptomatically.
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## Section 5 - FIRE FIGHTING MEASURES

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### EXTINGUISHING MEDIA

- The product contains a substantial proportion of water, therefore there are no restrictions on the type of extinguishing media which may be used. Choice of extinguishing media should take into account surrounding areas.

Though the material is non-combustible, evaporation of water from the mixture, caused by the heat of nearby fire, may produce floating layers of combustible substances.

In such an event consider:

- foam.
- dry chemical powder.
- carbon dioxide.

### FIRE FIGHTING

- Alert Fire Brigade and tell them location and nature of hazard.
- Wear breathing apparatus plus protective gloves in the event of a fire.
- Prevent, by any means available, spillage from entering drains or water courses.
- Use fire fighting procedures suitable for surrounding area.
- DO NOT approach containers suspected to be hot.
- Cool fire exposed containers with water spray from a protected location.
- If safe to do so, remove containers from path of fire.
- Equipment should be thoroughly decontaminated after use.

### FIRE/EXPLOSION HAZARD

- Non combustible.
- Not considered to be a significant fire risk.
- Expansion or decomposition on heating may lead to violent rupture of containers.
- Decomposes on heating and may produce toxic fumes of carbon monoxide (CO).
- May emit acrid smoke.

Decomposition may produce toxic fumes of: carbon dioxide (CO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>), other pyrolysis products typical of burning organic material.

### FIRE INCOMPATIBILITY

- None known.

### HAZCHEM

None

continued...



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## Section 6 - ACCIDENTAL RELEASE MEASURES

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### MINOR SPILLS

- Clean up all spills immediately.
- Avoid breathing vapours and contact with skin and eyes.
- Control personal contact with the substance, by using protective equipment.
- Contain and absorb spill with sand, earth, inert material or vermiculite.
- Wipe up.
- Place in a suitable, labelled container for waste disposal.

### MAJOR SPILLS

- Minor hazard.
- Clear area of personnel.
- Alert Fire Brigade and tell them location and nature of hazard.
- Control personal contact with the substance, by using protective equipment as required.
- Prevent spillage from entering drains or water ways.
- Contain spill with sand, earth or vermiculite.
- Collect recoverable product into labelled containers for recycling.
- Absorb remaining product with sand, earth or vermiculite and place in appropriate containers for disposal.
- Wash area and prevent runoff into drains or waterways.
- If contamination of drains or waterways occurs, advise emergency services.

**Personal Protective Equipment advice is contained in Section 8 of the MSDS.**

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## Section 7 - HANDLING AND STORAGE

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### PROCEDURE FOR HANDLING

- Limit all unnecessary personal contact.
- Wear protective clothing when risk of exposure occurs.
- Use in a well-ventilated area.
- Avoid contact with incompatible materials.
- When handling, DO NOT eat, drink or smoke.
- Keep containers securely sealed when not in use.
- Avoid physical damage to containers.
- Always wash hands with soap and water after handling.
- Work clothes should be laundered separately.
- Use good occupational work practice.
- Observe manufacturer's storage and handling recommendations contained within this MSDS.
- Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions are maintained.
- DO NOT allow clothing wet with material to stay in contact with skin.

### SUITABLE CONTAINER

- Polyethylene or polypropylene container.
- Packing as recommended by manufacturer.
- Check all containers are clearly labelled and free from leaks.

### STORAGE INCOMPATIBILITY

- Avoid reaction with oxidising agents.
- Avoid strong acids, acid chlorides, acid anhydrides and chloroformates.

### STORAGE REQUIREMENTS

- Store in original containers.
- Keep containers securely sealed.
- Store in a cool, dry, well-ventilated area.



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Section 7 - HANDLING AND STORAGE

- Store away from incompatible materials and foodstuff containers.
- Protect containers against physical damage and check regularly for leaks.
- Observe manufacturer's storage and handling recommendations contained within this MSDS.

## Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

### EXPOSURE CONTROLS

The following materials had no OELs on our records

- urea: CAS:57- 13- 6
- water: CAS:7732- 18- 5

### MATERIAL DATA

ADBLUE:

None assigned.

UREA:

- For urea:

CEL TWA: 10 mg/m<sup>3</sup> (compare WEEL-TWA)

(CEL = Chemwatch Exposure Limit)

Even if individuals inhaled 10 mg/m<sup>3</sup> of urea through the whole workday, they would only inhale 100 mg/day.

This increment, even if totally absorbed, would be insignificant when compared to the 30 g/day normal excretion rate. The workplace environmental exposure limit (WEEL) established by the AIHA is protective against the effects of urea as a nuisance dust.

WATER:

- No exposure limits set by NOHSC or ACGIH.

### PERSONAL PROTECTION

#### EYE

- Safety glasses with side shields.
- Chemical goggles.
- Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lens or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59], [AS/NZS 1336 or national equivalent].

#### HANDS/FEET

- The selection of the suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

The exact break through time for substances has to be obtained from the manufacturer of the protective gloves and

has to be observed when making a final choice.

Suitability and durability of glove type is dependent on usage. Important factors in the selection of gloves include:

- frequency and duration of contact,
- chemical resistance of glove material,
- glove thickness and

continued...



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## Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

### • dexterity

Select gloves tested to a relevant standard (e.g. Europe EN 374, US F739, AS/NZS 2161.1 or national equivalent).

• When prolonged or frequently repeated contact may occur, a glove with a protection class of 5 or higher (breakthrough time greater than 240 minutes according to EN 374, AS/NZS 2161.10.1 or national equivalent) is recommended.

• When only brief contact is expected, a glove with a protection class of 3 or higher (breakthrough time greater than 60 minutes according to EN 374, AS/NZS 2161.10.1 or national equivalent) is recommended.

• Contaminated gloves should be replaced.

Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly.

Application of a non-perfumed moisturiser is recommended.

• Wear chemical protective gloves, e.g. PVC.

• Wear safety footwear or safety gumboots, e.g. Rubber.

### OTHER

• Overalls.

• P.V.C. apron.

• Barrier cream.

• Skin cleansing cream.

• Eye wash unit.

### RESPIRATOR

•Particulate. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

The local concentration of material, quantity and conditions of use determine the type of personal protective equipment required. For further information consult site specific CHEMWATCH data (if available), or your Occupational Health and Safety Advisor.

### ENGINEERING CONTROLS

■ Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.

The basic types of engineering controls are:

Process controls which involve changing the way a job activity or process is done to reduce the risk.

Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment. Ventilation can remove or dilute an air contaminant if designed properly. The design of a ventilation system must match the particular process and chemical or contaminant in use.

Employers may need to use multiple types of controls to prevent employee overexposure.

General exhaust is adequate under normal operating conditions. If risk of overexposure exists, wear SAA approved respirator. Correct fit is essential to obtain adequate protection. Provide adequate ventilation in warehouse or closed storage areas.

## Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

### APPEARANCE

Clear liquid with a slightly ammoniacal odour; mixes with water.

### PHYSICAL PROPERTIES

Liquid.

Mixes with water.

State	Liquid	Molecular Weight	Not Applicable
Melting Range (°C)	- 11.5	Viscosity	Not Available
Boiling Range (°C)	100	Solubility in water (g/L)	Miscible

continued...



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### Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Flash Point (°C)	Not Applicable	pH (1% solution)	9.8- 10 (10% )
Decomposition Temp (°C)	100	pH (as supplied)	Not Available
Autoignition Temp (°C)	Not Available	Vapour Pressure (kPa)	6.4@40C
Upper Explosive Limit (%)	Not Applicable	Specific Gravity (water=1)	1.09@20C
Lower Explosive Limit (%)	Not Applicable	Relative Vapour Density (air=1)	Not Available
Volatile Component (%vol)	Not Available	Evaporation Rate	Not Available

### Section 10 - STABILITY AND REACTIVITY

#### CONDITIONS CONTRIBUTING TO INSTABILITY

- Presence of incompatible materials.
- Product is considered stable.
- Hazardous polymerisation will not occur.

*For incompatible materials - refer to Section 7 - Handling and Storage.*

### Section 11 - TOXICOLOGICAL INFORMATION

#### POTENTIAL HEALTH EFFECTS

##### ACUTE HEALTH EFFECTS

##### SWALLOWED

■ The material has NOT been classified by EC Directives or other classification systems as "harmful by ingestion". This is because of the lack of corroborating animal or human evidence. The material may still be damaging to the health of the individual, following ingestion, especially where pre-existing organ (eg. liver, kidney) damage is evident. Present definitions of harmful or toxic substances are generally based on doses producing mortality rather than those producing morbidity (disease, ill-health). Gastrointestinal tract discomfort may produce nausea and vomiting. In an occupational setting however, ingestion of insignificant quantities is not thought to be cause for concern.

##### EYE

■ The liquid may produce eye discomfort causing smarting, pain and redness.

##### SKIN

■ The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin.

##### INHALED

■ Not normally a hazard due to non-volatile nature of product.

The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting.

##### CHRONIC HEALTH EFFECTS

■ Long-term exposure to the product is not thought to produce chronic effects adverse to the health (as classified by EC Directives using animal models); nevertheless exposure by all routes should be minimised as a matter of course.

As with any chemical product, contact with unprotected bare skin; inhalation of vapour, mist or dust in work place atmosphere; or ingestion in any form, should be avoided by observing good occupational work practice.

#### TOXICITY AND IRRITATION

ADBLUE:

■ Not available. Refer to individual constituents.

continued...



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## Section 11 - TOXICOLOGICAL INFORMATION

### UREA:

■ unless otherwise specified data extracted from RTECS - Register of Toxic Effects of Chemical Substances.

### TOXICITY

Oral (rat) LD50:8471 mg/kg

Intraperitoneal (rat) LD50:>5000 mg/kg

Subcutaneous (rat) LD50:8200 mg/kg

Intratracheal (rat) LD50:567 mg/kg

Oral (mouse) LD50:11000 mg/kg

Subcutaneous (mouse) LD50:9200 mg/kg

Intravenous (mouse) LD50:4600 mg/kg

Intraperitoneal (Mouse) LD:6608 mg/kg

Intravenous (Rat) LD50:5300 mg/kg

Intravenous (Rabbit) LD:4800 mg/kg

Subcutaneous (Pig) LD:14800 mg/kg

■ Asthma-like symptoms may continue for months or even years after exposure to the material ceases. This may be due to a non-allergenic condition known as reactive airways dysfunction syndrome (RADS) which can occur following exposure to high levels of highly irritating compound. Key criteria for the diagnosis of RADS include the absence of preceding respiratory disease, in a non-atopic individual, with abrupt onset of persistent asthma-like symptoms within minutes to hours of a documented exposure to the irritant. A reversible airflow pattern, on spirometry, with the presence of moderate to severe bronchial hyperreactivity on methacholine challenge testing and the lack of minimal lymphocytic inflammation, without eosinophilia, have also been included in the criteria for diagnosis of RADS. RADS (or asthma) following an irritating inhalation is an infrequent disorder with rates related to the concentration of and duration of exposure to the irritating substance. Industrial bronchitis, on the other hand, is a disorder that occurs as result of exposure due to high concentrations of irritating substance (often particulate in nature) and is completely reversible after exposure ceases. The disorder is characterised by dyspnea, cough and mucus production. The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin.

### For urea:

There is little data that relates urea to human health other than its use in dermatology and some more limited applications in clinical medicine. The use of urea (at 10% concentration or less) in ointments and creams to treat dry skin has been widespread, and long term follow-up studies have indicated that the substance is nonallergenic and virtually free from side effects. Among other clinical therapeutic uses, the treatment of inappropriate secretion of antidiuretic hormone (SIADH) should be noted, because its chronic form has involved long term oral administration of large amounts of urea. Most patients have tolerated urea well, although diarrhoea is sometimes reported after ingestion of 60-90 g/day. The possibility exists that infection of *H. pylori* in human stomach may aggravate local effects by urea because of ammonia generation.

Acute toxicity: The acute toxicity by urea is well delineated by the oral route. Toxicity is low in mammals other than ruminants, especially cattle, and sheep, in which the rumen micro-organisms contain urease activity and metabolise urea to ammonia at a high rate. In mice and rats, urea is of low toxicity even by the subcutaneous and intravenous route.

Repeated dose toxicity: No well-conducted repeated dose toxicity studies on urea were located. Chronic toxicity and carcinogenicity screening studies in mice and rats fed with 4500, 9000 or 45000 ppm in diet (up to about 6750 mg/kg body weight/day for mice and about 2250 mg/kg body weight/day for rats) did not uncover any treatment-related toxic syndromes in the various organs studied. Neither was any weight depression noted at terminal necropsy for animals of either sex or species at any dose levels. Thus the NOAELs were about 6750 mg/kg body weight/day for mice and about 2250 mg/kg body weight/day for rats.

Repeated dose toxicity studies with rats by skin application over 4 weeks and 25 weeks were conducted using urea ointment at 10%, 20% and 40% concentrations, and no consistent treatment-related toxic effects were found. The ointments were applied on a 20 cm<sup>2</sup> area of the back skin; it is concluded that the repeated dose toxicity of urea by dermal route is low.

Reproductive/developmental toxicity: The studies cited under repeated dose toxicity did not indicate any toxic effects on the reproductive organs of mice and rats. No adequate teratogenicity/developmental toxicity studies of urea with mammals were located. According to one rat study, 50 g/kg body weight/day administered by gavage in two doses 12 hours apart for an average of 14 days did not cause outstanding (external) teratogenicity; the mean birthweight of the newborn was lower but the litter size greater. Injection of urea into the air sack of eggs shows that urea is toxic to the development of chick embryo.

No NOAEL can be given for the reproductive/developmental toxicity of urea because appropriate studies are

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### Section 11 - TOXICOLOGICAL INFORMATION

lacking.

Genetic toxicity: Urea has been negative in several appropriately conducted bacterial mutagenicity tests.

Urea caused DNA single strand breaks in mammalian cells in vitro and was clastogenic for mammalian cells in vitro and in vivo but only at concentrations much beyond the physiological range (about 50-100 higher concentrations than found in human blood). The mechanism of genotoxicity is probably non-specific (e.g. difference in osmotic pressure across the cell membrane).

NOTE: Substance has been shown to be mutagenic in at least one assay, or belongs to a family of chemicals producing damage or change to cellular DNA.

Altered sleep time, change in motor activity, antipsychosis, dyspnea, methaemoglobinaemia, convulsions, lymphomas recorded.

Carcinogenic by RTECS criteria.

#### WATER:

■ No significant acute toxicological data identified in literature search.

#### SKIN

urea	GESAMP/EHS Composite List - GESAMP Hazard Profiles	D1: skin irritation/corrosion	1
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### Section 12 - ECOLOGICAL INFORMATION

#### UREA:

Algae IC50 (72hr.) (mg/l): 10000

log Kow (Prager 1995): - 1.09

log Kow (Sangster 1997): - 2.11

log Pow (Verschuereen 1983): 1.31415929

■ For Urea: log Kow: -2.97 to -2.26; Henry's Law Constant: 4.4E-8 atm m3/mol. Urea is essentially non-volatile in solid form.

Atmospheric Fate: Urea will not evaporate from water to the atmosphere and is expected to be readily degraded by reactions with photochemically produced hydroxyl radicals; half-life is expected to be less than 1 day.

Degradation of urea to ammonia causes NH3-emissions to the air.

Terrestrial Fate: The highest environmental exposure for urea is via fertilizer when 85 - 90% of urea is incorporated into the soil. Urea will hydrolyze into ammonium in a matter of days to several weeks. Urea is relatively leachable from the soil into surface water and groundwater especially if the soil surface is saturated with water.

Aquatic Fate: Urea is very soluble in water and may rapidly biodegrade to a moderate extent. Urea is not expected to evaporate significantly. Urea can be leached relatively easily into the surface water and the groundwater. Degradation products (e.g. nitrate, nitrite and ammonium) can be measured after urea has undergone biodegradation.

Ecotoxicity: Urea is not likely to undergo bioaccumulation and generally has low acute ecotoxicity to organisms. The degradation product of urea, ammonia, is known to be toxic to all vertebrates; however, in neutral and acidic conditions, ammonia exists in the form of the ammonium ion. Urea may directly influence eutrophication in the environment and there is a pollution risk to groundwater when urea is used as a fertilizer, and a deicing agent at airports. Ecosystems may be affected following long-term use of urea in the control of soil acidification and by ammonia emissions to air.

DO NOT discharge into sewer or waterways.

#### Ecotoxicity

Ingredient	Persistence: Water/Soil	Persistence: Air	Bioaccumulation	Mobility
urea	LOW	No Data Available	LOW	HIGH

continued...



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### Section 13 - DISPOSAL CONSIDERATIONS

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- Recycle wherever possible.
- Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suitable treatment or disposal facility can be identified.
- Dispose of by: burial in a land-fill specifically licenced to accept chemical and / or pharmaceutical wastes or incineration in a licenced apparatus (after admixture with suitable combustible material).
- Decontaminate empty containers. Observe all label safeguards until containers are cleaned and destroyed.

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### Section 14 - TRANSPORTATION INFORMATION

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#### HAZCHEM:

None (ADG7)

NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS: ADG7, UN, IATA, IMDG

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### Section 15 - REGULATORY INFORMATION

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POISONS SCHEDULE None

#### REGULATIONS

##### Regulations for ingredients

##### urea (CAS: 57-13-6) is found on the following regulatory lists;

"Australia - Victoria Occupational Health and Safety Regulations - Schedule 9: Materials at Major Hazard Facilities (And Their Threshold Quantity) Table 2", "Australia High Volume Industrial Chemical List (HVICL)", "Australia Inventory of Chemical Substances (AICS)", "Australia National Pollutant Inventory", "GESAMP/EHS Composite List - GESAMP Hazard Profiles", "IMO IBC Code Chapter 17: Summary of minimum requirements", "IMO MARPOL 73/78 (Annex II) - List of Other Liquid Substances", "International Fragrance Association (IFRA) Survey: Transparency List", "OECD List of High Production Volume (HPV) Chemicals"

##### water (CAS: 7732-18-5) is found on the following regulatory lists;

"Australia High Volume Industrial Chemical List (HVICL)", "Australia Inventory of Chemical Substances (AICS)", "IMO IBC Code Chapter 18: List of products to which the Code does not apply", "International Fragrance Association (IFRA) Survey: Transparency List", "OECD List of High Production Volume (HPV) Chemicals", "OSPAR National List of Candidates for Substitution – Norway"

No data for AdBlue (CW: 4696-32)

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### Section 16 - OTHER INFORMATION

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■ Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

A list of reference resources used to assist the committee may be found at:  
[www.chemwatch.net/references](http://www.chemwatch.net/references).

■ The (M)SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

continued...



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Section 16 - OTHER INFORMATION

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Issue Date: 6-Sep-2012

Print Date: 6-Sep-2012

*This is the end of the MSDS.*



# MATERIAL SAFETY DATA SHEET

NAME: FLOCKIT LIQUID CONCENTRATE NONIONIC

ITEM NO: FLN

## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

**COMPANY NAME:** Reynolds Soil Technologies Pty Ltd (ABN 31 068 825 696)  
**ADDRESS:** 14, Greg Chappell Drive,  
Burleigh Heads, Queensland, Australia, 4220  
**EMERGENCY PHONE:** 0417 770567  
**PHONE:** 07 5522 0244  
**FAX:** 07 5522 0799  
**EMAIL:** info@rstolutions.com.au

**PRODUCT NAME:** Flockit Liquid Concentrate Nonionic

**SYNONYMS:** Flockit, Flockit Nonionic

### USE:

- A water sediment treatment.
- A water flocculent used where electricity is unavailable for standard dosing equipment.

## 2. HAZARD IDENTIFICATION

NON-HAZARDOUS substance. NON-DANGEROUS GOODS. According to NOHSC Criteria, and ADG Code.

RISK PHRASES	None under normal operating conditions
SAFETY PHRASES	S24: Avoid Contact with skin S39 Wear eye/face protection S26: In case of contact with eyes, rinse with plenty of water and contact Doctor or Poisons Information Centre

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Micro dispersion of non hazardous polymers

## 4. FIRST AID MEASURES

SWALLOWED	No hazards which require special first aid measures.
EYES	Rinse thoroughly with plenty of water, also under the eyelids. In case of persistent eye irritation, consult a physician.
SKIN	Wash off immediately with soap and plenty of water. In case of persistent skin irritation, consult a physician.
INHALED	No hazards which require special first aid measures
FIRST AID FACILITIES	Ensure potable water is available to use as an eye rinse / wash.
ADVICE TO DOCTOR	Treat according to symptoms.



# MATERIAL SAFETY DATA SHEET

NAME: FLOCKIT LIQUID CONCENTRATE NONIONIC

ITEM NO: FLN

## 5. FIRE-FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA	Water, Water spray, Foam, Carbon dioxide (CO <sub>2</sub> ), Dry powder.
HAZARDS FROM COMBUSTION PRODUCTS	None known.
PRECAUTIONS FOR FIRE FIGHTERS & SPECIAL PROTECTIVE EQUIPMENT	Spills produce extremely slippery surfaces. No special protective equipment required.
SPECIFIC HAZARDS	Spills produce extremely slippery surfaces.

## 6. ACCIDENTAL RELEASE MEASURES

EMERGENCY PROCEDURES	No special precautions required. Do not contaminate water.
METHODS AND MATERIALS FOR CONTAINMENT AND CLEAN UP	Do not flush with water. Dam up. Soak up with inert absorbent material. If liquid has been spilt in large quantities clean up promptly by scoop or vacuum. Keep in suitable and closed containers for disposal. After cleaning, flush away traces with water.

## 7. HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING	Avoid contact with skin and eyes. When preparing the working solutions ensure there is adequate ventilation. When using do not smoke. Wash hands and face before breaks and immediately after handling the product. Handle in accordance with good industrial hygiene and safety practice.
CONDITIONS FOR SAFE STORAGE	Keep in a dry cool place (0-35°C). Freezing will affect the physical condition and may damage the material. Store in a shaded area.
INCOMPATIBILITIES	None known.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

NATIONAL EXPOSURE STANDARDS	Not Available.
BIOLOGICAL LIMIT VALUES	Not Available.
ENGINEERING CONTROLS	Use local exhaust if misting occurs. Natural ventilation is adequate in absence of mists.
PERSONAL PROTECTION	<p>RESPIRATORY PROTECTION In case of insufficient ventilation wear suitable respiratory equipment.</p> <p>HAND PROTECTION Rubber gloves.</p> <p>EYE PROTECTION Safety glasses with side-shields. Do not wear contact lenses where this product is used.</p> <p>SKIN AND BODY PROTECTION Chemical resistant apron or protective suit if splashing or repeated contact with solution is likely.</p>



# MATERIAL SAFETY DATA SHEET

NAME: FLOCKIT LIQUID CONCENTRATE NONIONIC

ITEM NO: FLN

## 9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	Viscous Liquid (White Colour)
ODOUR:	Aliphatic
pH:	6 – 8 @ 0.5% Solution
VAPOUR PRESSURE:	Not available.
VAPOUR DENSITY:	Not available.
BOILING POINT/RANGE:	>100
FREEZING/MELTING POINT:	<0
SOLUBILITY:	Miscible
SPECIFIC GRAVITY (water = 1)	1.05
FLAMMABILITY:	Does not ignite
FLASH POINT:	Does not flash

## 10. STABILITY AND REACTIVITY

CHEMICAL STABILITY	Stable. Hazardous polymerisation does not occur.
CONDITIONS TO AVOID	Oxidising agents may cause exothermic reactions.
INCOMPATIBLE MATERIALS	Oxidizing agents may cause exothermic reactions.
HAZARDOUS DECOMPOSITION PRODUCTS	Thermal decomposition may produce Carbon oxides (COx) Nitrogen oxides (NOx).
HAZARDOUS REACTIONS	Thermal decomposition may produce Carbon oxides (COx). Nitrogen oxides (NOx).

## 11. TOXICOLOGICAL INFORMATION

### TOXICITY DATA FOR SIMILAR PRODUCT:

Oral -	LD50/oral/rat < 5000mg/kg
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### ACUTE & CHRONIC HEALTH EFFECTS

SWALLOWED	The product is not expected to be toxic.
EYE	May cause eye irritation with susceptible persons.
SKIN	May cause skin irritation with susceptible persons.
INHALED	The product is not expected to be toxic by inhalation.
CHRONIC EFFECTS	Prolonged skin contact may defat the skin and product dermatitis.
SENSITISATION	Product is not expected to be sensitising.



# MATERIAL SAFETY DATA SHEET

NAME: FLOCKIT LIQUID CONCENTRATE NONIONIC

ITEM NO: FLN

## 12. ECOLOGICAL INFORMATION

ECOTOXICITY	
Oral Toxicity LD50 (Rat):	>5,000 mg/kg
Toxicity to Fish:	LC50/96 hours > 100mg/l (OECD 203)
Toxicity to Daphnia:	EC50/48 hours > 100mg/l (OECD 202)
Toxicity to Algae:	IC50/Scenedesmus subspicatus/72 hours > 100mg/l (OECD 201)
HYDROLYSIS:	Does not hydrolyse.
PERSISTENCE AND DEGRADABILITY:	Not readily biodegradable.

## 13. DISPOSAL CONSIDERATIONS

DISPOSAL METHODS	In accordance with local, state and federal regulations.
SPECIAL REQUIREMENTS FOR LANDFILL OR INCINERATION	Rinse empty containers with water and use the rinse water to prepare the working solution. Can be landfilled or incinerated, when in compliance with local, state and federal regulations.

## 14. TRANSPORT INFORMATION

UN No: None Allocated	D.G. Class: None Allocated	CAS No.: None Allocated
Hazchem: None Allocated	Sub. Risk: None Allocated	Susdp.: None Allocated
G.T.EPG: None Allocated	Spec.EPG: None Allocated	Pack.Grp: None Allocated

NON-DANGEROUS GOODS. No special transport requirements necessary.

## 15. REGULATORY INFORMATION

POISONS SCHEDULE	No data
OTHER	EINECS/ELINCS, TSCA, DSL, AICS, IECSC, ENCS, ECL, PICCS: All components of this product are either listed on the inventory or are exempt from listing.

## 16. OTHER INFORMATION

PREPARATIONS AND REVISIONS	This MSDS was issued on 19/04/2016 in accordance with the National Code of Practice for the Preparation of Material Safety Data Sheets 2 <sup>nd</sup> Edition [NOHSC:2011(2003)] <b>Version 1.0 supersedes all other versions.</b>
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This MSDS summarises our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. It should be read taking into account how the product is handled in your particular situation and how it is used in conjunction with other products.

This is the last page of the MSDS.