Hi-Tec Oil Traders Pty Ltd ABN 28 053 837 362
5 Tarlington Place Smithfield NSW 2164
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SAFETY DATA SHEET

Issue Date: 23 December 2016
Blue Air
Version: 2

Product name: Blue Air

1. COMPANY DETAILS AND PRODUCT IDENTIFICATION

COMPANY: ADDRESS:	Hi-Tec Oil Traders Pty Ltd. (ABN 28 053 837 362) PO Box 322 Castle Hill NSW 1765 5 Tarlington Place, Smithfield NSW 2164
TELEPHONE NUMBER:	1300 796 009
FAX NUMBER:	(02) 9604 1611
EMERGENCY TELEPHONE NUMBER:	1300 796 009
PRODUCT NAME:	Blue Air
OTHER NAMES:	None
MANUFACTURER'S PRODUCT CODE:	HI8-3015
USE:	Water based diesel engine exhaust gas treatment fluid
ADDITIONAL INFORMATION:	Refer to Product Information Sheet for additional information.
OTHER INFORMATION:	Visit our website: www.hi-tecoils.com.au Email: hitecoils@hi-tecoils.com.au

2. HAZARDS IDENTIFICATION

HAZARD CLASSIFICATION:	NON-HAZARDOUS SUBSTANCE NON-DANGEROUS GOODS Hazard classification according to criteria of NOHSC and GHS. Dangerous goods classification according to Australian Dangerous Goods Code.
SIGNAL WORD(S):	None
IRRITANCY OF PRODUCT:	Not classified as an irritant.
SENSITISATION OF PRODUCT:	Not known to be a sensitiser.
TERATOGENICITY:	No teratogenic effects known.
OTHER INFORMATION:	Used fluids may contain harmful impurities that have accumulated during use. The concentration of such impurities will depend on use and they may present risks to health and environment on disposal. All used fluids should be handled with caution and skin contact avoided as far as possible.

3. IDENTIFICATION / COMPOSITION OF INGREDIENTS

CHEMICAL CHARACTERISTICS**:** Liquid

INGREDIENTS:-

CHEMICAL ENTITY:	CAS No.	PROPORTION
Urea	57-13-6	30 - 40%
Water	7732-18-15	>60%

4. FIRST AID MEASURES

HEALTH EFFECTS

SWALLOWED: If a large quantity is ingested seek immediate medical attention. Give water to drink. Never give anything by mouth to an unconscious person. DO NOT induce vomiting. If vomiting occurs get immediate medical attention due to aspiration into lungs risk.

EYE: Immediately irrigate with copious amounts of water for at least 15 minutes. Eyelids to be held open. Obtain medical attention if irritation occurs. In all cases of eye contamination it is a sensible precaution to seek medical advice.

SKIN: Remove contaminated clothing and wash skin thoroughly with plenty of soap and water. Obtain medical attention if irritation occurs. High pressure injection through the skin requires **URGENT** medical attention for possible incision, irrigation and/or debridement.

INHALED: Remove victim from exposure to fresh air – avoid becoming a casualty. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. Seek medical advice if effects persist. If breathing laboured and patient cyanotic (blue), ensure airways are clear and have qualified person give oxygen through face mask. If breathing has stopped apply artificial respiration at once. In the event of cardiac arrest, apply external cardiac massage and seek urgent medical aid.

FIRST AID FACILITIES: Normal washroom facilities are generally suitable. Ensure an eye wash station and safety shower is available and ready for use.

ADVICE TO DOCTOR: Treat symptomatically.

OTHER INFORMATION: Keep water and mild soap near work site.

5. FIRE FIGHTING MEASURES

FIRE/EXPLOSION HAZARD

HAZARDS OF USE/STORAGE:	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.
HAZARDS FROM COMBUSTION PRODUCTS:	Combustion products may include: oxides of carbon, nitrogen, ammonia and a complex mixture of airborne unidentified organic and inorganic solid and liquid particulates.
FIRE-FIGHTING RECOMMENDATIONS:	If safe to so, remove containers from path of fire. Keep storage tanks, pipelines, containers, fire exposed surfaces, etc. cool with water spray. Avoid spreading liquid and fire by water flooding.
PRECAUTION:	
SUITABLE 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. Options include water spray (fog), foam, dry chemical and carbon dioxide. Choice of extinguishing media should take into account surrounding areas.
PROTECTIVE MEASURES:	Fire fighters should wear self-contained breathing apparatus in positive pressure mode if at risk of exposure to products of combustion.
REACTIVITY:	May react with strong oxidising agents.

6. ACCIDENTAL RELEASE MEASURES

SPILLS & DISPOSAL: Slippery when spilt. Avoid accidents, clean up immediately. Avoid creating dusty conditions and prevent wind dispersal.

CLEAN-UP PROCEDURE - SMALL SPILLS (20L or less): Absorb or contain liquid with dry sand, earth or spill control material. Shovel up using non-sparking tools and place in a sound labelled sealable container for subsequent safe disposal. Place leaking containers in a sound labelled drum. Scrub contaminated surfaces with detergent solution. Retain washings as contaminated waste.

CLEAN-UP PROCEDURES - LARGE SPILLS (Greater than 20L): Transfer to a sound labelled, sealable container for product recovery or safe disposal. Treat residues as for small spills.

PERSONAL PRECAUTIONS: Extinguish naked flames. Remove ignition sources. No smoking. Avoid sparks. Take precautionary measures against static discharges. Avoid contact with skin, eyes and clothing. Evacuate the area of non-essential personnel. Shut off leaks, if possible without personal risk. Do not breathe vapours. Ventilate contaminated area thoroughly. Dispose of according to local regulations.

6. ACCIDENTAL RELEASE MEASURES (CONT)

OTHER INFORMATION:

PROCEDURES IN CASES OF LEAKAGE OR BREAKAGE: Stop the source of the leak or release and contain spill if possible. Ventilate area. Use respirator and protective clothing outlined in this MSDS. Cover spill with inert absorbent earth. Use a stiff brush to mix thoroughly. Sweep up and place in a sound labelled disposable container. Scrub contaminated area with detergent and water using a stiff brush. Pick up liquid with additional absorbent material and place in a sound labelled disposable container. Prevent contamination of groundwater or surface water.

7. HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING:

When handling product in drums, safety footwear should be worn and proper handling equipment should be used. Prevent spillages. Ensure the appropriate personal protective equipment is used when handling this product. Ensure high level of personal hygiene is maintained when using this product. That is; always wash hands before eating, drinking smoking or using the toilet.

SAFE STORAGE CONDITIONS:

Keep containers closed at all times. Store in a cool place out of direct sunlight. Store away from oxidising agents and strong acids. Check containers regularly for leaks.

CORROSIVENESS:

Not corrosive.

STORAGE REGULATIONS:

Store in a well ventilated place away from ignition sources, oxidising agents, foodstuffs and clothing.
Keep containers closed when not in use.
Refer to AS 1940 – The Storage and Handling of Flammable Liquids, and NOHSC: 1015 – National Standard for Storage and Handling of Workplace Dangerous Goods for further information.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

NATIONAL EXPOSURE STANDARDS:

No exposure standard has been established for this product.

NOHSC Exposure Standard: Urea – time weighted average (TWA) 10 mg/m^3 is recommended. Even if individuals inhaled 10 mg/m3 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.

OTHER EXPOSURE INFORMATION:

Exposure Standard means the average concentration of a particular substance in the worker's breathing zone, exposure to which, according to current knowledge, should not cause adverse health effects nor cause undue discomfort to nearly all workers. It can be of three forms; time-weighted average (TWA), peak limitation, or short term exposure limit (STEL).

8. EXPOSURE CONTROLS / PERSONAL PROTECTION (CONT)

ENGINEERING CONTROLS:	Maintain concentration below recommended exposure limit. Special ventilation is not normally required. However, in the operation of certain equipment or at elevated temperatures mists or vapour may be generated and localised exhaust ventilation should be provided to maintain airborne concentration levels below the exposure standard or the Manufacturer's recommended exposure standard.
RESPIRATORY PROTECTION:	A respirator is not normally required. Airborne concentrations should be kept at lowest level possible. If vapours, mists or dusts are generated and the recommended exposure limit for the product is exceeded, use appropriate AS/NZS 1715/1716 approved half –face filter respirator suitable for organic vapours or air supplied respirator are worn. Air supplied respirators should always be worn when the airborne concentration of the contaminant or the oxygen content of the air is unknown
EYE PROTECTION:	Safety glasses, goggles or face shield as appropriate.
HAND PROTECTION:	PVC, butyl rubber, natural rubber (latex), nitrile rubber gloves.
FOOTWEAR:	Enclosed footwear.
BODY PROTECTION:	Overalls or similar protective apparel.
HYGIENE MEASURES:	Always wash hands before eating, drinking, smoking or using the toilet. If contamination occurs, change clothing. Launder contaminated clothing before reuse. Discard internally contaminated gloves.
SPECIAL PROTECTIVE MEASURES:	The product will not burn but the residue may if preheated to dryness. Isolate from sources of heat, naked flames or sparks.

9. PHYSICAL AND CHEMICAL PROPERTIES

FORM:	Liquid
APPEARANCE:	Clear and bright liquid.
COLOUR:	Clear pale blue
ODOUR:	Slightly ammoniacal
CRYSTALLISATION POINT:	-11.5 ^{o}C
BOILING POINT:	100^{o}C
DECOMPOSITION TEMPERATURE:	> 135^{o}C
DENSITY @ 20^{o}C (kg/L):	1.09 typical

9. PHYSICAL AND CHEMICAL PROPERTIES (CONT)

FLASHPOINT (ASTM D-93), Closed Cup:	Not applicable
FLAMMABILITY LIMITS -LOWER:	Not applicable
FLAMMABILITY LIMITS -UPPER:	Not applicable
FLAMMABILITY:	Not combustible
SOLUBILITY IN WATER:	Miscible
SOLUBILITY IN ORGANIC SOLVENTS:	Not available
VAPOUR DENSITY (Air = 1):	Not available
VISCOSITY @ 40 ^{0}C (mm^2/s):	Not available
pH (as supplied)	8 – 10
EVAPORATION RATE:	Not available
AUTO-IGNITION TEMPERATURE:	Not available
EXPLOSION PROPERTIES:	Not considered an explosion risk under normal conditions of use.
OTHER INFORMATION:	These physical data and other properties do not constitute a specification.

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY:	Stable under normal conditions of use.
CONDITIONS TO AVOID:	Heat, direct sunlight, open flames or other sources of ignition.
INCOMPATIBLE MATERIALS:	Oxidising agents, acids and alkalis, calcium or sodium hypochlorite.
HAZARDOUS REACTIONS:	Highly reactive with oxidising agents, acids and alkalis. Urea reacts with calcium or sodium hypochlorite to form the explosive nitrogen trichloride.
HAZARDOUS POLYMERISTION:	Will not occur.

11. TOXICOLOGICAL INFORMATION

TOXICOLOGY INFORMATION: The product may cause skin irritation after prolonged or repeated exposure and may produce a contact dermatitis (nonallergic). This form of dermatitis is often characterised by skin redness (erythema) and swelling epidermis. Histologically there may be intercellular oedema of the spongy layer (spongiosis) and intracellular oedema of the epidermis.

	TOXICITY	IRRITATION
Blue Air	Dermal (Rabbit) LD50: >5000 mg/kg Oral (Rat) LD50: >5000 mg/kg	Not Available
Urea	Oral (rat) LD50: 8471 mg/kgd	Skin (human): 22 mg/3 d (I)- mild
Water	Oral (rat) LD50: >90000 mg/kg	Not Available

INHALATION: Inhalation of mists or aerosols of the product may produce respiratory irritation.

INGESTION: The product 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 (e.g. 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.

SKIN: The product will have a de-fatting effect on the skin. Contact with skin may result in irritation after prolonged or repeated exposures.

EYE: The product may produce eye discomfort causing transient smarting, blinking.

REPRODUCTIVE TOXICITY: The product is not a known for reproductive toxicity.

CHRONIC EFFECTS: Prolonged or repeated exposure to the product may result in irritation, with the possibility of dermatitis.

MUTAGENICITY: The product is not a known for reproductive toxicity. However urea 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.

CARCINOGENICITY: The product is not a known carcinogen.

12. ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: Leaching and penetration of the product through soils is generally regarded as resulting in no long-term persistence as component urea degrades to ammonia. However fresh or used product may be harmful to aquatic life.
Do not allow the product to enter drains or watercourses.

TOXICITY DATA FOR UREA:

Ingredient	Endpoint	Test Duration (hr)	Species	Value	Source
Urea	EC50	384	Crustacea	894.861mg/L	3
Urea	EC50	96	Algae or other aquatic plants	42184.758mg/L	3
Urea	BCF	24	Algae or other aquatic plants	0.05mg/L	4
Urea	EC50	48	Crustacea	3910mg/L	4
Urea	LC50	96	Fish	5mg/L	4
Urea	NOEC	168	Fish	200mg/L	2

Legend:
Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 3. EPIWIN Suite V3.12 -Aquatic Toxicity Data (Estimated) 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) -Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data

PERSISTENCE AND DEGRADABILITY: Urea Persistence: Water/Soil- LOW
Urea Persistence: Air – LOW

BIOACCUMULATIVE POTENTIAL: Urea Bioaccumulation - LOW (BCF = 10)

MOBILITY IN SOIL: Urea Mobility - LOW (KOC = 4.191)

13. DISPOSAL CONSIDERATIONS

DISPOSAL CONSIDERATIONS: Dispose of according to federal, E.P.A. and state regulations.
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 licenced land-fill 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.

14. TRANSPORT INFORMATION

ROAD & RAIL TRANSPORT:

ADG REQUIREMENT — Not classified as a Dangerous Good according to the Australian Code for the Transport of Dangerous Goods by Road and Rail.

MARITIME TRANSPORT:

IMO/IMDG REQUIREMENT — Not classified as a Dangerous Good according to the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

AIR TRANSPORT:

ICAO/IATA REQUIREMENT — Not classified as a Dangerous Good according to the criteria of the International Maritime Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

15. REGULATORY INFORMATION

POISON SCHEDULE: Not scheduled.

PACKING & LABELLING: No special packaging or labelling requirements.

AUSTRALIAN INVENTORY STATUS: All components are listed or exempted.

16. OTHER INFORMATION

CONTACT PERSON/POINT: General Manager 1300 796 009

This information was prepared in good faith from the best information available at the time of issue. It is based on the present level of research and to this extent we believe it is accurate. However, no guarantee of accuracy is made or implied and since conditions of use are beyond our control, all information relevant to usage is offered without warranty. The manufacturer will not be held responsible for any unauthorised use of this information or for any modified or altered versions.

If you are an employer it is your duty to tell your employees, and any others that may be affected, of any hazards described in this sheet and of any precautions that should be taken.

Safety Data Sheets are updated frequently. Please ensure you have a current copy.

16. OTHER INFORMATION

LITERATURE REFERENCES:

* NOHSC: 2011 National Code of Practice for the preparation of Material Safety Data Sheets.
* NOHSC: 1008 Approved Criteria for Classifying Hazardous Substances.
* NOHSC: 10005 List of Designated Hazardous Substances.
* NOHSC: 1005 Control of Workplace Hazardous Substances, National Code of Practice.
* NOHSC: 2007 Control of Workplace Hazardous Substances, National Code of Practice.
* NOHSC: 1003 Exposure Standards for Atmospheric Contaminants in the Occupational Environment, National Exposure Standards.
* NOHSC: 3008 Exposure Standards for Atmospheric Contaminants in the Occupational Environment, Guidance Note.
* NOHSC: 1015 Storage and Handling of Workplace Dangerous Goods, National Standard.
* NOHSC: 2017 Storage and Handling of Workplace Dangerous Goods, National Code of Practice.
* SUSDP: Standard for the Uniform Scheduling of Drugs and Poisons
* ADG: Australian Dangerous Goods Code
* MSDS of component materials.

LAST CHANGE:

Supersedes document issued: 16th May 2013
Reason/s for revision: Minor editorial changes to comply with GHS requirements.

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END OF SDS