ThreeBond

SAFETY DATA SHEET

Issuing Date 13-Jan-2023	Revision date 10-May-2024	Revision Number 2		
Section 1: Identification: Product identifier and chemical identity				
Product identifier				
Product Name	SUPER ENGINE CONDITIONER (DIESEL)			
Other means of identification				
EPNG	Aerosols			
Recommended use of the chemica	and restrictions on use			
Recommended use	Cleaner.			
Uses advised against	No information available.			
Details of manufacturer or importe	<u>r_</u>			
<u>Supplier</u> ThreeBond Singapore Pte Ltd. Austra 1/26-28 Abbott Road, Hallam, VIC 38 Tel: 61-3-9753-2522	lia Branch 03			
For further information, please contac	<u>t</u>			
Contact Point	service HSE			
Emergency telephone number				
Emergency telephone number	(03) 9753 2522 (Business Hours: Mon - Fri, 8:00 am - 4:00 pm AE	ST)		

Section 2: Hazard(s) identification

GHS Classification				
Aerosols	Category 1			
Acute toxicity - Dermal	Category 4			
Acute toxicity - Inhalation (Vapors)	Category 2			
Acute toxicity - Inhalation (Dusts/Mists)	Category 4			



Signal word

Danger

Hazard statements

Extremely flammable aerosol Pressurized container: May burst if heated Harmful in contact with skin Harmful if inhaled Fatal if inhaled

Precautionary Statements - Prevention

Wear protective gloves/protective clothing/eye protection/face protection Do not breathe dust/fume/gas/mist/vapors/spray Use only outdoors or in a well-ventilated area Wear respiratory protection Ground and bond container and receiving equipment Use non-sparking tools Take action to prevent static discharges Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking Keep container tightly closed Use explosion-proof electrical/ventilating / lighting/ .? / equipment Keep cool Do not spray on an open flame or other ignition source Do not pierce or burn, even after use **Precautionary Statements - Response** Specific treatment (see .? on this SDS) Specific treatment is urgent (see .? on this label) IF ON SKIN: Wash with plenty of water and soap Call a POISON CENTER or doctor if you feel unwell Take off contaminated clothing and wash it before reuse IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower] IF INHALED: Remove person to fresh air and keep comfortable for breathing Immediately call a POISON CENTER or doctor Call a POISON CENTER or doctor if you feel unwell In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish **Precautionary Statements - Storage** Store in a well-ventilated place. Keep container tightly closed Store locked up Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F **Precautionary Statements - Disposal** Dispose of contents/container to an approved waste disposal plant

Other hazards which do not result in classification May be harmful if swallowed.

Section 3: Composition/information on ingredients

Chemical name	CAS No	Weight-%	
2-Butoxyethanol	111-76-2	5-15	
Butane	106-97-8	1-10	
Ethoxylated lauryl alcohol	9002-92-0	1-5	
Sodium dodecylbenzenesulfonate	25155-30-0	1-5	
Diethanolamine	111-42-2	0.1-1	
Ammonium hydroxide	1336-21-6	0.1-1	
Coconut diethanolamide	68603-42-9	0.1-1	
Non-hazardous ingredients	Proprietary	Balance	

Section 4: First aid measures

Description of first aid measures

General advice	Show this safety data sheet to the doctor in attendance.	
Inhalation	Remove to fresh air.	
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area.	
Skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If symptoms persist, call a physician.	
Ingestion	Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Call a physician.	
Self-protection of the first aider	Remove all sources of ignition. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Use personal protective equipment as required. See section 8 for more information.	
Most important symptoms and effect	ts, both acute and delayed	
Symptoms	No information available.	
Indication of any immediate medical	attention and special treatment needed	
Note to physicians	Treat symptomatically.	

Section 5: Firefighting measures

Suitable Extinguishing Media

Suitable Extinguishing Media	Dry chemical. Carbon dioxide (CO2). Water spray. Alcohol resistant foam.		
Large Fire	CAUTION: Use of water spray when fighting fire may be inefficient.		
Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.		
Specific hazards arising from the c	hemical		
Specific hazards arising from the chemical	Risk of ignition. Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.		
Special protective actions for fire-f	ighters		
Special protective equipment and	Eirofightors should wear solf contained breathing apparatus and full firefighting turnout		

Special protective equipment and	Firefighters should wear self-contained breathing apparatus and full firefighting turnout
precautions for fire-fighters	gear. Use personal protection equipment.

Section 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions	Evacuate personnel to safe areas. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eves or clothing. Ensure adequate
	ventilation. Keep people away from and upwind of spill/leak. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material.

Other information	Ventilate the area. Refer to protective measures listed in Sections 7 and 8.		
For emergency responders	Use personal protection recommended in Section 8.		
Environmental precautions			
Environmental precautions	Refer to protective measures listed in Sections 7 and 8. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.		
Methods and material for containme	ent and cleaning up		
Methods for containment	Stop leak if you can do it without risk. Do not touch or walk through spilled material. A vapor suppressing foam may be used to reduce vapors. Dike far ahead of spill to collect runoff water. Keep out of drains, sewers, ditches and waterways. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.		
Methods for cleaning up	Take precautionary measures against static discharges. Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.		
Precautions to prevent secondary h	azards		
Prevention of secondary hazards	Clean contaminated objects and areas thoroughly observing environmental regulations.		

Section 7: Handling and storage, including how the chemical may be safely used

Precautions for safe handling

Advice on safe handling	Use personal protection equipment. Avoid breathing vapors or mists. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Use with local exhaust ventilation. Use spark-proof tools and explosion-proof equipment. Keep in an area equipped with sprinklers. Use according to package label instructions. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing.
General hygiene considerations	Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection.
Conditions for safe storage, includi	ng any incompatibilities
Storage Conditions	Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labeled containers. Do not store near combustible materials. Keep in an area equipped with sprinklers. Store in accordance with the particular national regulations. Store in accordance with local regulations. Store locked up.
Incompatible materials	None known based on information supplied.

Section 8: Exposure controls and personal protection

Control parameters

Exposure Limits

Chemical name	Australia	New Zealand	ACGIH TLV
2-Butoxyethanol	TWA: 20 ppm	TWA: 25 ppm	TWA: 20 ppm
111-76-2	TWA: 96.9 mg/m ³	TWA: 121 mg/m ³	
	STEL: 50 ppm	Skin	

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	STEL: 242 mg/m ³		
Butane	TWA: 800 ppm	TWA: 800 ppm	STEL: 1000 ppm explosion
106-97-8	TWA: 1900 mg/m ³	TWA: 1900 mg/m ³	hazard
Diethanolamine	TWA: 3 ppm	TWA: 3 ppm	TWA: 1 mg/m ³ inhalable
111-42-2	TWA: 13 mg/m ³	TWA: 13 mg/m ³	fraction and vapor
	_	Skin	S*

Chemical name	European Union	United Kingdom	Germany MAK
2-Butoxyethanol	TWA: 20 ppm	TWA: 25 ppm	TWA: 10 ppm
111-76-2	TWA: 98 mg/m ³	TWA: 123 mg/m ³	TWA: 49 mg/m ³
	STEL: 50 ppm	STEL: 50 ppm	Peak: 20 ppm
	STEL: 246 mg/m ³	STEL: 246 mg/m ³	Peak: 98 mg/m ³
	*	Sk*	*
Butane	-	TWA: 600 ppm	TWA: 1000 ppm
106-97-8		TWA: 1450 mg/m ³	TWA: 2400 mg/m ³
		STEL: 750 ppm	Peak: 4000 ppm
		STEL: 1810 mg/m ³	Peak: 9600 mg/m ³
Diethanolamine	-	-	TWA: 1 mg/m ³
111-42-2			Peak: 1 mg/m ³
			*
			skin sensitizer

Biological occupational exposure

limits

Chemical name	Australia	ACGIH	European Union
2-Butoxyethanol	-	200 mg/g creatinine - urine	-
111-76-2		(Butoxyacetic acid with	
		hydrolysis) - end of shift	

Appropriate engineering controls

Engineering controls	Showers Eyewash stations Ventilation systems.
Individual protection measures, suc	h as personal protective equipment
Eye/face protection	Tight sealing safety goggles.
Skin and body protection	Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron. Antistatic boots.
Hand protection	Wear suitable gloves. Impervious gloves.
Respiratory protection	In case of inadequate ventilation wear respiratory protection.
Environmental exposure controls	No information available.
Thermal hazards	No information available.

Section 9: Physical and chemical properties

Information on basic physical and chemical properties

Physical state Appearance Color Odor Odor threshold	Liquid No information available Light yellow Transparent Solvent odor. No information available		
<u>Property</u> pH	<u>Values</u> 9.5	<u>Remarks</u> •	Method

Melting point / freezing point Initial boiling point and boiling	no data available
range	
Flash point	42 °C
Evaporation rate	no data available
Flammability	no data available
Flammability limit in air	
Upper flammability or explosive limits	no data available
Lower flammability or explosive limits	no data available
Vapor pressure	no data available
Relative vapor density	no data available
Relative density	0.93
Water solubility	Insoluble in water
Solubility(ies)	no data available
Partition coefficient	no data available
Autoignition temperature	no data available
Decomposition temperature	No information available
Kinematic viscosity	no data available
Dynamic viscosity	20 mPa∙s
Explosive properties	No information available
Oxidizing properties	No information available
Other information	
Softening point	No information available
Molecular weight	No information available
Liquid Density	No information available
Bulk density	No information available

Section 10: Stability and reactivity

Particle characteristics

Reactivity	
Reactivity	No information available.
Chemical stability	
Stability	Stable under normal conditions.
Explosion data Sensitivity to mechanical impact Sensitivity to static discharge	no data available. Yes.
Possibility of hazardous reactions	
Possibility of hazardous reactions	None under normal processing.
Conditions to avoid	
Conditions to avoid	Heat, flames and sparks.
Incompatible materials	
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	_
Hazardous decomposition products	May generate harmful gas by incineration.

No information available

Section 11: Toxicological information

Acute toxicity

Information on likely routes of exposure

Product Information

Numerical measures of toxicity	- Product Information
Symptoms	No information available.
Ingestion	May be harmful if swallowed.
Skin contact	May be absorbed through the skin in harmful amounts. Harmful in contact with skin. (based on components).
Eye contact	Specific test data for the substance or mixture is not available.
Inhalation	Specific test data for the substance or mixture is not available.

No information available

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral)	2,456.60	mg/kg
ATEmix (dermal)	1,852.13	mg/kg
ATEmix (inhalation-vapor)	1.96 mg	/I
ATEmix (inhalation-dust/mist)	2.03 mg	/I

Unknown acute toxicity

24.69 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity

54.78 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)

58.87 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
2-Butoxyethanol	= 470 mg/kg (Rat)	= 435 mg/kg (Rabbit)	= 450 ppm (Rat)4 h
			= 486 ppm (Rat)4 h
Butane	-	-	= 658 g/m³ (Rat)4 h
Ethoxylated lauryl alcohol	= 1 g/kg (Rat)	> 2000 mg/kg (Rat)	-
Sodium dodecylbenzenesulfonate	= 500 mg/kg (Rat)	-	= 310 mg/m ³ (Rat)4 h
Diethanolamine	= 780 mg/kg (Rat)	= 11.9 mL/kg (Rabbit)	-
Ammonium hydroxide	= 350 mg/kg (Rat)	-	-
Coconut diethanolamide	> 5000 mg/kg (Rat)	>2 g/kg (Rabbit)	-

See section 16 for terms and abbreviations

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

Skin corrosion/irritation No information available.

Serious eye damage/eye irritation No information available.

Respiratory or skin sensitization No information available.

Germ cell mutagenicity

No information available.

Carcinogenicity

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	Australia	European Union	IARC
2-Butoxyethanol - 111-76-2	-	-	Group 3
Butane - 106-97-8	Carc. 1A	-	-
Diethanolamine - 111-42-2	-	-	Group 2B
Coconut diethanolamide - 68603-42-9	-	-	Group 2B

Legend

IARC (International Agency for Research on Cancer)

Group 2B - Possibly Carcinogenic to Humans Group 3 - Not Classifiable as to Carcinogenicity in Humans

Reproductive toxicity	No information available.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Aspiration hazard	No information available.

Section 12: Ecological information

Ecotoxicity

Aquatic ecotoxicity

Unknown aquatic toxicity

0~% of the mixture consists of component(s) of unknown hazards to the aquatic environment.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
2-Butoxyethanol	-	LC50: =1490mg/L (96h,	-	EC50: >1000mg/L (48h,
		Lepomis macrochirus)		Daphnia magna)
		LC50: =2950mg/L (96h,		
		Lepomis macrochirus)		
Sodium	-	LC50: =10.8mg/L (96h,	-	-
dodecylbenzenesulfonate		Oncorhynchus mykiss)		
Diethanolamine	EC50: =7.8mg/L (72h,	LC50: 4460 - 4980mg/L	-	EC50: =55mg/L (48h,
	Desmodesmus	(96h, Pimephales		Daphnia magna)
	subspicatus)	promelas)		
	EC50: 2.1 - 2.3mg/L (96h,	LC50: 1200 - 1580mg/L		
	Pseudokirchneriella	(96h, Pimephales		
	subcapitata)	promelas)		
		LC50: 600 - 1000mg/L		
		(96h, Lepomis		
		macrochirus)		
Ammonium hydroxide	_	LC50: =8.2mg/L (96h,	-	EC50: =0.66mg/L (48h,
		Pimephales promelas)		water flea)

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				EC50: =0.66mg/L (48h,
				Daphnia pulex)
Coconut diethanolamide	-	LC50: =3.6mg/L (96h,	-	-
		Brachydanio rerio)		

Terrestrial ecotoxicty There is no data for this product.

Persistence and degradability

Persistence and degradability No information available.

Bioaccumulative potential

Bioaccumulation

Component Information

Chemical name	Partition coefficient
2-Butoxyethanol	0.81
Butane	2.31
Ethoxylated lauryl alcohol	1.937
Sodium dodecylbenzenesulfonate	1.96
Diethanolamine	-2.46

Mobility

Mobility	No information available.	
Other adverse effects		
Other adverse effects	No information available.	

Section 13: Disposal considerations

Waste treatment methods

Waste from residues/unused products	Should not be released into the environment. Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.
Contaminated packaging	Empty containers pose a potential fire and explosion hazard. Do not cut, puncture of weld containers.

See section 8 for more information

Section 14: Transport information

ADG	
UN number or ID number	UN1950
UN proper shipping name	Aerosols
Transport hazard class(es)	2.1
Special Provisions	63, 190, 277, 327, 344, 381
Description	UN1950, Aerosols, 2.1
UN number or ID number	UN1950
UN proper shipping name	Aerosols, flammable

Transport hazard class(es)	2.1		
Special Provisions	A145, A167, A802		
Description	UN1950, Aerosols, flammable, 2.1		
IMDG UN number or ID number UN proper shipping name Transport hazard class(es) EmS-No Special Provisions Marine pollutant Description	UN1950 Aerosols 2.1 F-D, S-U 63,190, 277, 327, 344, 381, 959 NP UN1950 Aerosols 2.1		

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code No information available

Section 15: Regulatory information

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

National regulations

<u>Australia</u>

See section 8 for national exposure control parameters

Standard for Uniform Scheduling of Medicines and Poisons (SUSMP)

Classified as a scheduled poison according to the Standard for Uniform Scheduling of Medicines and Poisons (SUSMP) **Poison Schedule Number** 4

Australian Industrial Chemicals Introduction Scheme (AICIS)

Contact supplier for inventory compliance status

Chemical name	Australian Industrial Chemicals Introduction Scheme (AICIS)	Additional information
2-Butoxyethanol - 111-76-2	Present	Specific information requirement: Obligations to provide information apply. You must tell us within 28 days if the circumstances of your importation or manufacture (introduction) are different to those in our assessment.
Butane - 106-97-8	Present	-
Ethoxylated lauryl alcohol - 9002-92-0	Present	-
Sodium dodecylbenzenesulfonate - 25155-30-0	Present	-
Diethanolamine - 111-42-2	Present	-
Ammonium hydroxide - 1336-21-6	Present	-
Coconut diethanolamide - 68603-42-9	Present	-

Illicit Drug Precursors/Reagents

This product does not contain any substance(s) on the Illicit Drug Precursors/Reagents list.

Major hazard (accident/incident planning) regulation

Verify that license requirements are met <u>Hazardous chemical</u>

Threshold quantity (T)

Compressed or liquefied gases of Division 2.1 or Subsidiary Risk	200	
2.1		
Compressed or liquefied gases that meet the criteria for Toxic in	200	
table 15.3		
Liquids with flash points <61°C kept above their boiling points at	200	
ambient conditions		
Materials that meet the criteria for Toxic in table 15.3	200	

National pollutant inventory

Subject to reporting requirement

Chemical name	National pollutant inventory	
2-Butoxyethanol - 111-76-2	20 MW Threshold category 2b total	
	60000 MWH Threshold category 2b total	
	1 tonne/h Threshold category 2a total	
	25 tonne/yr Threshold category 1a total	
	400 tonne/yr Threshold category 2a total	
	2000 tonne/yr Threshold category 2b total	
Butane - 106-97-8	20 MW Threshold category 2b total	
	60000 MWH Threshold category 2b total	
	1 tonne/h Threshold category 2a total	
	25 tonne/yr Threshold category 1a total	
	400 tonne/yr Threshold category 2a total	
	2000 tonne/yr Threshold category 2b total	
Diethanolamine - 111-42-2	20 MW Threshold category 2b total	
	60000 MWH Threshold category 2b total	
	1 tonne/h Threshold category 2a total	
	25 tonne/yr Threshold category 1a total	
	400 tonne/yr Threshold category 2a total	
	2000 tonne/yr Threshold category 2b total	

International Inventories

NZIOC Contact supplier for inventory compliance status	ί.
TSCA Contact supplier for inventory compliance status	<i>.</i>
DSL/NDSL Contact supplier for inventory compliance status	<i>.</i>
EINECS/ELINCS Contact supplier for inventory compliance status	<i>.</i>
ENCS Contact supplier for inventory compliance status	.
IECSC Contact supplier for inventory compliance status	.
KECL Contact supplier for inventory compliance status	.
PICCS Contact supplier for inventory compliance status	<i>.</i>

Legend:

AIIC - Australian Inventory of Industrial Chemicals

NZIOC - New Zealand Inventory of Chemicals

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances **ENCS** - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

Section 16: Any other relevant information

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Revision Note

***Indicates updated data since last publication.

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation
С	Carcinogen		

Key literature references and sources for data used to compile the SDS Agency for Toxic Substances and Disease Registry (ATSDR) U.S. Environmental Protection Agency ChemView Database European Food Safety Authority (EFSA) EPA (Environmental Protection Agency) Acute Exposure Guideline Level(s) (AEGL(s)) U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act U.S. Environmental Protection Agency High Production Volume Chemicals Food Research Journal Hazardous Substance Database International Uniform Chemical Information Database (IUCLID) National Institute of Technology and Evaluation (NITE) Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS) Australian Industrial Chemicals Introduction Scheme (AICIS) NIOSH (National Institute for Occupational Safety and Health) National Library of Medicine's ChemID Plus (NLM CIP) National Library of Medicine's PubMed database (NLM PUBMED) National Toxicology Program (NTP) New Zealand's Chemical Classification and Information Database (CCID) Organization for Economic Co-operation and Development Environment, Health, and Safety Publications Organization for Economic Co-operation and Development High Production Volume Chemicals Program Organization for Economic Co-operation and Development Screening Information Data Set World Health Organization

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

End of Safety Data Sheet