

Vers 2.2	sion	Revision Date: 22.03.2017		S Number: 571-00003	Date of last issue: 20.10.2016 Date of first issue: 03.12.2013			
SEC	SECTION 1. PRODUCT AND COMPANY IDENTIFICATION							
	Product	name	:	Wurth Diesel Sys	tem Cleaner			
	Product code		:	5861 013 300				
	<b>Manufa</b> Compa	ncturer or supplier's d		<b>ls</b> Wurth Australia P	Ptv Ltd			
	Address			2/1 Healey Road Dandenong Sout				
	Telephone		:	+61 3 8788 1111				
	Emergency telephone number		:	1300 657 765. Advisory office in case of poisoning - Nat Poisons Centre: 131 126				
	E-mail address		:	prodsafe@wuerth.com				
		mended use of the ch mended use	nemi	cal and restrictio	ons on use			
	1.600IIII		•	Detergent				

#### **SECTION 2. HAZARDS IDENTIFICATION**

GHS Classification Gases under pressure	:	Compressed gas
GHS label elements Hazard pictograms	:	
Signal word	:	Warning
Hazard statements	:	H280 Contains gas under pressure; may explode if heated.
Precautionary statements	:	<b>Storage:</b> P410 + P403 Protect from sunlight. Store in a well-ventilated place.

#### Other hazards which do not result in classification

May displace oxygen and cause rapid suffocation.

#### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS



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Subs	tance / Mixture	: Mixture		
	rdous components		CAS-No.	Concentration (% w/w
Cherr	nical name /lene glycol		CAS-No. 57-55-6	Concentration (% w/w)
Cherr Propy	nical name			

#### **SECTION 4. FIRST AID MEASURES**

If inhaled	:	If inhaled, remove to fresh air. Get medical attention if symptoms occur.
In case of skin contact	:	Wash with water and soap as a precaution. Get medical attention if symptoms occur.
In case of eye contact	:	Flush eyes with water as a precaution. Get medical attention if irritation develops and persists.
If swallowed	:	If swallowed, DO NOT induce vomiting. Get medical attention if symptoms occur. Rinse mouth thoroughly with water.
Most important symptoms and effects, both acute and delayed	:	None known.
Protection of first-aiders	:	No special precautions are necessary for first aid responders.
Notes to physician	:	Treat symptomatically and supportively.

#### SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	:	Water spray Alcohol-resistant foam Carbon dioxide (CO2) Dry chemical
Unsuitable extinguishing media	:	None known.
Specific hazards during fire- fighting	:	Exposure to combustion products may be a hazard to health. If the temperature rises there is danger of the vessels bursting due to the high vapor pressure.
Hazardous combustion prod- ucts	:	Carbon oxides Nitrogen oxides (NOx)
Specific extinguishing meth- ods	:	Use extinguishing measures that are appropriate to local cir- cumstances and the surrounding environment. Use water spray to cool unopened containers.



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				Remove undama so. Evacuate area.	ged containers from fire area if it is safe to do	
Special protective equipment for firefighters		:	Wear self-contained breathing apparatus for firefighting if nec- essary. Use personal protective equipment.			
	Hazche	em Code	:	2YE		
SEC	TION 6	. ACCIDENTAL RELE	AS	E MEASURES		
1	tive equ	al precautions, protec- uipment and emer- procedures	:	Follow safe handl ment recommend	ing advice and personal protective equip- ations.	
I	Enviror	nmental precautions	:	Prevent further lea Prevent spreading barriers). Retain and dispos	e environment must be avoided. akage or spillage if safe to do so. g over a wide area (e.g. by containment or oil se of contaminated wash water. should be advised if significant spillages ed.	
	Methods and materials for containment and cleaning up		:	Soak up with inert absorbent material. For large spills, provide dyking or other appropriate contain- ment to keep material from spreading. If dyked material can be pumped, store recovered material in appropriate contain Clean up remaining materials from spill with suitable absor- bent. Local or national regulations may apply to releases and dis- posal of this material, as well as those materials and items employed in the cleanup of releases. You will need to deter mine which regulations are applicable. Sections 13 and 15 of this SDS provide information regardin certain local or national requirements.		
SEC	TION 7	. HANDLING AND ST	OR	AGE		
	Technic	cal measures	:		measures under EXPOSURE SONAL PROTECTION section.	
I	Local/T	otal ventilation	:	Use only with ade	quate ventilation.	

Advice on safe handling :	Handle in accordance with good industrial hygiene and safety practice. Take care to prevent spills, waste and minimize release to the environment.
Hygiene measures :	Ensure that eye flushing systems and safety showers are located close to the working place. When using do not eat, drink or smoke. Wash contaminated clothing before re-use.

## SAFETY DATA SHEET



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	Conditi	ons for safe storage	:	Store in accordan	ell-ventilated place. Ice with the particular national regulations. Durn, even after use. St from sunlight.
	Materials to avoid		:	Do not store with Strong oxidizing a	the following product types: agents
	Recom peratur	mended storage tem- e	:	> 10 °C	

#### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

•	• •			
Components	CAS-No.	Value type (Form of exposure)	Control parame- ters / Permissible concentration	Basis
Propylene glycol	57-55-6	TWA (partic- ulate)	10 mg/m3	AU OEL
		TWA (Total (vapour and particles))	150 ppm 474 mg/m3	AU OEL
Triethanolamine	102-71-6	TWA	5 mg/m3	AU OEL
	Further infor	mation: Sensitiser		
		TWA	5 mg/m3	ACGIH
Carbon dioxide	124-38-9	STEL	30,000 ppm 54,000 mg/m3	AU OEL
		TWA	5,000 ppm 9,000 mg/m3	AU OEL
		TWA	5,000 ppm	ACGIH
		STEL	30,000 ppm	ACGIH

#### Components with workplace control parameters

Engineering measures	:	Ensure adequate ventilation, especially in confined areas. Minimize workplace exposure concentrations.
Personal protective equipme	ent	
Respiratory protection	:	Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.
Filter type	:	Self-contained breathing apparatus
Hand protection Material Break through time Glove thickness Directive	: : : :	Nitrile rubber 480 min 0.45 mm DIN EN 374



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	Remarks		:	: Choose gloves to protect hands against chemicals of on the concentration and quantity of the hazardous s stance and specific to place of work. For special app we recommend clarifying the resistance to chemical aforementioned protective gloves with the glove man er. Wash hands before breaks and at the end of wor		
	Eye protection		:	Wear the following personal protective equipment: Safety glasses		
	Skin an	d body protection	:	Skin should be washed after contact.		
SEC	TION 9	. PHYSICAL AND CHE	EMI		6	
	Appear	ance	:	Aerosol containir	ng a compressed gas	
	Colour		:	clear		
	Odour		:	odourless		
	Odour <sup>-</sup>	Threshold	:	No data available	9	
	рН		:	9.42 (20 °C)		
	Melting	point/freezing point	:	No data available	9	
	Initial b range	oiling point and boiling	:	100 °C		
	Flash p	oint	:	Not applicable		
	Evapor	ation rate	:	Not applicable		
	Flamma	ability (solid, gas)	:	Not classified as	a flammability hazard	
		explosion limit / Upper bility limit	:	12.6 %(V)		
		explosion limit / Lower bility limit	:	2.6 %(V)		
	Vapour	pressure	:	7.5 bar (20 °C)		
	Relative	e vapour density	:	Not applicable		
	Density	,	:	1.03 g/cm3 (20 ° Method: DIN 517 Active ingredient	57	
	Solubili Wat	ty(ies) er solubility	:	soluble		
	Partitio	n coefficient: n-	:	Not applicable		



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	ol/water gnition temperature	:	No data available	
Decon	Decomposition temperature		No data available	9
Viscos Vis	sity cosity, kinematic	:	Not applicable	
Explos	sive properties	:	Not explosive	
Oxidiz	ing properties	:	The substance o	r mixture is not classified as oxidizing.
Particl	e size	:	Not applicable	

#### SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	Not classified as a reactivity hazard.	
Chemical stability	:	Stable under normal conditions.	
Possibility of hazardous reac- tions	:	If the temperature rises there is danger of the vessels bursting due to the high vapor pressure. Can react with strong oxidizing agents.	
Conditions to avoid	:	None known.	
Incompatible materials	:	Oxidizing agents Acids	

#### SECTION 11. TOXICOLOGICAL INFORMATION

Exposure routes	: Inhalation Skin contact
	Ingestion
	Eye contact

#### Acute toxicity

Not classified based on available information.

#### Components:

## Propylene glycol:

Acute oral toxicity	:	LD50 (Rat): > 5,000 mg/kg
Acute inhalation toxicity	:	LC50 (Rabbit): > 159 mg/l Exposure time: 4 h Test atmosphere: dust/mist

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Acute	dermal toxicity	: LD50 (Rabbit Assessment: toxicity	:): > 2,000 mg/kg The substance or mixture has no acute dermal
	nanolamine: oral toxicity	: LD50 (Rat): >	> 5,000 mg/kg
Acute	inhalation toxicity	: LC50 (Rat): > Exposure tim Test atmosph Assessment: tion toxicity	e: 4 h
Acute	dermal toxicity		:): > 2,000 mg/kg The substance or mixture has no acute dermal
Carbo	on dioxide:		
Acute	inhalation toxicity	: LC50 (Rat): 5 Exposure tim Test atmosph	e: 4 h
Skin	corrosion/irritation		

#### Skin corrosion/irritation

Not classified based on available information.

#### **Components:**

#### Propylene glycol:

Species: Rabbit Method: OECD Test Guideline 404 Result: No skin irritation

#### Triethanolamine:

Species: Rabbit Method: OECD Test Guideline 404 Result: No skin irritation

#### Serious eye damage/eye irritation

Not classified based on available information.

#### **Components:**

#### Propylene glycol:

Species: Rabbit Result: No eye irritation Method: OECD Test Guideline 405

#### Triethanolamine:

Species: Rabbit



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Result: No eye irritation

#### Respiratory or skin sensitisation

#### Skin sensitisation

Not classified based on available information.

#### **Respiratory sensitisation**

Not classified based on available information.

# Components:

## Propylene glycol:

Test Type: Maximisation Test Exposure routes: Skin contact Species: Guinea pig Result: negative

#### Triethanolamine:

Test Type: Maximisation Test Exposure routes: Skin contact Species: Guinea pig Method: OECD Test Guideline 406 Result: negative

#### **Chronic toxicity**

#### Germ cell mutagenicity

Not classified based on available information.

#### **Components:**

# Propylene glycol: Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES) Result: negative Genotoxicity in vivo : Test Type: Mammalian erythrocyte micronucleus test (in vivo cytogenetic assay) Species: Mouse Application Route: Intraperitoneal injection Result: negative Triethanolamine: : Test Type: Bacterial reverse mutation assay (AMES) Result: negative

#### Carcinogenicity

Not classified based on available information.



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<u>Com</u>	ponents:			
Prop	ylene glycol:			
Speci Applio Expos	ies: Rat cation Route: Ingestion sure time: 2 Years lt: negative			
Speci Applio Expos	h <b>anolamine:</b> ies: Rat cation Route: Skin conta sure time: 103 weeks lt: negative	act		
Repr	oductive toxicity			
Not c	lassified based on avail	able	information.	
Com	ponents:			
Prop	ylene glycol:			
Effect	ts on fertility	:	Test Type: Three Species: Mouse Application Route Result: negative	-generation reproduction toxicity study e: Ingestion
Effect ment	ts on foetal develop-	:	Test Type: Embry Species: Mouse Application Route Result: negative	vo-foetal development e: Ingestion
Trietl	hanolamine:			
Effect	ts on fertility	:	Test Type: Two-g Species: Rat Application Route Result: negative	eneration reproduction toxicity study
Effect ment	ts on foetal develop-	:	Species: Rat Application Route	vo-foetal development e: Ingestion fest Guideline 414
STOT	- single exposure			

Not classified based on available information.

#### STOT - repeated exposure

Not classified based on available information.



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#### Repeated dose toxicity

#### **Components:**

#### Propylene glycol:

Species: Rat, male NOAEL: 1,700 mg/kg Application Route: Ingestion Exposure time: 2 yr

#### Triethanolamine:

Species: Rat NOAEL: 1,000 mg/kg Application Route: Ingestion Exposure time: 90 Days

Species: Rat NOAEL: 0.5 mg/l Application Route: inhalation (dust/mist/fume) Exposure time: 28 Days Method: OECD Test Guideline 412

#### Aspiration toxicity

Not classified based on available information.

#### **SECTION 12. ECOLOGICAL INFORMATION**

#### Ecotoxicity

#### **Components:**

Propylene glycol:		
Toxicity to fish	:	LC50 (Oncorhynchus mykiss (rainbow trout)): 40,613 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Ceriodaphnia dubia (water flea)): 18,340 mg/l Exposure time: 48 h
Toxicity to algae	:	ErC50 (Skeletonema costatum (marine diatom)): 19,300 mg/l Exposure time: 72 h Method: OECD Test Guideline 201
Toxicity to daphnia and other aquatic invertebrates (Chron-ic toxicity)	:	NOEC (Ceriodaphnia dubia (water flea)): 13,020 mg/l Exposure time: 7 d
Toxicity to microorganisms	:	NOEC (Pseudomonas putida): > 20,000 mg/l Exposure time: 18 h
Triethanolamine:		
Toxicity to fish	:	LC50 (Pimephales promelas (fathead minnow)): 11,800 mg/l Exposure time: 96 h



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		to daphnia and other invertebrates	:	EC50 (Ceriodaphi Exposure time: 48	nia dubia (water flea)): 609.88 mg/l s h
	Toxicity	to algae	:	EC50 (Desmodes Exposure time: 72	mus subspicatus (green algae)): 512 mg/l ? h
		invertebrates (Chron-	:	NOEC (Daphnia n Exposure time: 21	nagna (Water flea)): 16 mg/l d
	Toxicity	to microorganisms	:	IC50: > 1,000 mg/ Exposure time: 3 Method: OECD Te	h
	Carbon	dioxide:			
	Toxicity	to fish	:	Exposure time: 96	nacrochirus (Bluegill sunfish)): > 100 mg/l 5 h on data from similar materials
		to daphnia and other invertebrates	:	Exposure time: 48	nagna (Water flea)): > 100 mg/l 5 h on data from similar materials
	Persist	ence and degradabili	ty		
	<u>Compo</u>	onents:			
	Propyle	ene glycol:			
	Biodegr	adability	:	Result: Readily bio Biodegradation: 9 Exposure time: 28 Method: OECD Te	98.3 %
	Trietha	nolamine:			
		adability	:	Result: Readily bid Biodegradation: 1 Exposure time: 5	00 %
	Bioacc	umulative potential			
	<u>Compo</u>	nents:			
		ene glycol: n coefficient: n- /water	:	log Pow: -1.07	
	Trietha	nolamine:			
	Bioaccu	umulation	:	Species: Cyprinus Bioconcentration f	acarpio (Carp) factor (BCF): < 0.4



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	ion coefficient: n- ol/water	:	log Pow: -1.9	
	<b>lity in soil</b> ata available			
••	r adverse effects ata available			
No da		SIDER	ATIONS	
No da	ata available			ordance with local regulations.

## SECTION 14. TRANSPORT INFORMATION

#### International Regulations

#### UNRTDG

UN number Proper shipping name Class Packing group Labels	:	UN 1950 AEROSOLS 2.2 Not assigned by regulation 2.2
IATA-DGR UN/ID No. Proper shipping name Class Packing group Labels Packing instruction (cargo aircraft) Packing instruction (passen- ger aircraft)		UN 1950 Aerosols, non-flammable 2.2 Not assigned by regulation Non-flammable Gas 203
<b>IMDG-Code</b> UN number Proper shipping name	:	UN 1950 AEROSOLS
Class Packing group Labels EmS Code Marine pollutant	:	2.2 Not assigned by regulation 2.2 F-D, S-U no



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#### Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

#### **National Regulations**

<b>ADG</b> UN number Proper shipping name Class Packing group Labels		UN 1950 AEROSOLS 2.2 Not assigned by regulation 2.2
Labels Hazchem Code	•	2.2 2YE

#### **SECTION 15. REGULATORY INFORMATION**

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

Standard for the Uniform : Schedule 5 Scheduling of Medicines and Poisons

Prohibition/Licensing Requirements

: There is no applicable prohibition or notification/licensing requirements, including for carcinogens under Commonwealth, State or Territory legislation.

## The components of this product are reported in the following inventories:

AICS

: All ingredients listed or exempt.

#### **SECTION 16. OTHER INFORMATION**

Further information Revision Date	:	22.03.2017
Sources of key data used to compile the Safety Data Sheet	:	Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agency, http://echa.europa.eu/

Items where changes have been made to the previous version are highlighted in the body of this document by two vertical lines.

Date format : dd.mm.yyyy

Full text of other abbreviation	ons	
ACGIH	:	USA. ACGIH Threshold Limit Values (TLV)
AU OEL	:	Australia. Workplace Exposure Standards for Airborne Con- taminants.
ACGIH / TWA	:	8-hour, time-weighted average



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ACGIH / STEL	:	Short-term exposure limit
AU OEL / TWA	:	Exposure standard - time weighted average
AU OEL / STEL	:	Exposure standard - short term exposure limit

AICS - Australian Inventory of Chemical Substances; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR -Carcinogen, Mutagen or Reproductive Toxicant; CPR - Controlled Products Regulations; DIN -Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC -No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS -Workplace Hazardous Materials Information System

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 is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.

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