

Certified to Standards of:

- ❖ ISO 9001-2015.
- ❖ ISO 14001-2015.
- ❖ GMP(Good manufacturing practises).

SPILCARE -GC 27 (GAS TURBINE COMPRESSOR CLEANER) GREEN CHEMISTRY

Spilcare GC 27 is a water based blend of solvents (non-hydrocarbon)and biodegradable surfactant(s), engineered for on and off line cleaning of gas turbine compressors.

Spilcare GC 27 will remove oils, greases, soot, salts, atmospheric contaminants and other contaminants found on gas turbine compressors. The cleaning restores and maintains gas turbine engine performance and efficiency, reduces fuel consumption and reduces exhaust gas temperatures for a given power output, increasing both availability and reliability.

APPLICATION

Spilcare GC 27 is recommended for use in the off-line and on-line washing of gas turbine compressor. It is effective in removing compressor deposits such as salt, oil and industrial pollutants. The recommended method to safe guard a Gas Turbine compressor unit against sulphidation attack is to wash the compressor and turbine frequently with Spilcare GC 27.

Spilcare GC 27 can be used on:

- All interior and exterior parts of the gas turbine.
- Compressor air foils.
- Turbine blades.
- Turbine internal parts.
- Free turbine exterior surfaces.

Spilcare GC 27 is a highly concentrated cleaner and can be diluted with up to 10 parts of water depending on soil conditions to remove:

- Light soils.
- Salts.
- Atmospheric soils.
- Cooling oils.
- Synthetic hydraulic fluids.
- Sodium compounds.

BENEFITS OF SPILCARE GC-27

- Compatible with turbine materials.
- Guards against sulphidation attack.
- Keeps compressor air foils free from contamination.
- Contains corrosion inhibitor.
- Reduces corrosion of compressor blades, stators and discs.
- Excellent cleaning properties.
- Maintains compressor efficiency.
- Non flammable.



SPILCARE-O METACLEN PVT. LTD.

128/12, Emerald Bldg, Anna Nagar West Extn, Thirumangalam, Chennai - 600 040, India.

Phone : +91-44-7200061522 Telefax: +91-44-2615 4972 | Email : nk@spilcaretech.com Web: www.spilcare.com

SECTION 1 : Identification of the substance/mixture and of the company/undertaking

.1.1 Product identifier

Mixture :	Product form
Spilcare GC-27 :	Product name
GC-27 :	Product code

.2.1 Relevant identified uses of the substance or mixture and uses advised against

.1.2.1 Relevant identified uses

Industrial use :	Main use category
On and offline cleaning of gas turbine compressors :	Use of the substance/mixture

.2.2.1 Uses advised against

No additional information available

.3.1 Details of the supplier of the safety data sheet

Manufacturer

Spilcare-O Metaclen Pvt Ltd
 128/12 Emerald Bldg, Annanagar, Thirumangalam,
 Chennai, 600040 - India
 T 91-442-615-4972 (9:30 am - 6:00 pm)
nk@spilcaretech.com

.4.1 Emergency telephone number

91-984-027-3834 : Emergency number

SECTION 2 : Hazards identification

.1.2 Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

H315	Skin Irrit. 2
H319	Eye Irrit. 2

Full text of hazard classes and H-statements : see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

.2.2 Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]



: Hazard pictograms (CLP)

GHS07

Warning : Signal word (CLP)

H315 - Causes skin irritation. : Hazard statements (CLP)

H319 - Causes serious eye irritation.

P264 - Wash hands, forearms and face thoroughly after handling. :

P280 - Wear protective gloves/protective clothing/eye protection/face protection/hearing protection. : Precautionary statements (CLP)

P302+P352 - IF ON SKIN: Wash with plenty of water.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313 - If eye irritation persists: Get medical advice/attention.

P362+P364 - Take off contaminated clothing and wash it before reuse.

1.5% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral) : Unknown acute toxicity (CLP) - SDS

11.5% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal)

11.5% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Vapours))

Contains 10.55 % of components with unknown hazards to the aquatic environment : Unknown hazards to the aquatic environment (CLP)

.3.2 Other hazards

No additional information available

SECTION 3 : Composition/information on ingredients

Spilcare GC-27

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

.1.3 Substances

Not applicable

.2.3 Mixtures

Classification according to Regulation (EC) No. 1272/2008 [CLP]	%	Product identifier	Name
Skin Irrit. 2, H315 Eye Irrit. 2, H319	15 – 30	CAS-No. 107-41-5 EC-No. 203-489-0 EC Index-No. 603-053-00-3	2,4-Pentanediol, 2-methyl-
Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319	1 - 10	CAS-No. 5131-66-8 EC-No. 225-878-4 EC Index-No. 603-052-00-8	1-Butoxy-2-propanol
Eye Irrit. 2, H319	1 – 3	CAS-No. 7320-34-5 EC-No. 230-785-7	Diphosphoric acid, tetrapotassium salt

Full text of H-statements: see section 16

SECTION 4 :First aid measures

.1.4 Description of first aid measures

If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.	:	First-aid measures after inhalation
IF ON SKIN: Wash with plenty of Water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention.	:	First-aid measures after skin contact
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.	:	First-aid measures after eye contact
Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.	:	First-aid measures after ingestion

.2.4 Most important symptoms and effects, both acute and delayed

May cause irritation to the respiratory tract.	:	Symptoms/effects after inhalation
Causes skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin.	:	Symptoms/effects after skin contact
Causes serious eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.	:	Symptoms/effects after eye contact
May be harmful if swallowed. May cause gastrointestinal irritation, nausea, vomiting and diarrhea.	:	Symptoms/effects after ingestion

.3.4 Indication of any immediate medical attention and special treatment needed

Symptoms may be delayed. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

SECTION 5 :Firefighting measures

.1.5 Extinguishing media

Foam. Dry powder. Carbon dioxide. Water spray. Sand.	:	Suitable extinguishing media
Do not use water jet.	:	Unsuitable extinguishing media

.2.5 Special hazards arising from the substance or mixture

Products of combustion may include, and are not limited to: oxides of carbon, oxides of sodium.	:	Fire hazard
---	---	-------------

.3.5 Advice for firefighters

Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).	:	Protection during firefighting
--	---	--------------------------------

SECTION 6 :Accidental release measures

.1.6 Personal precautions, protective equipment and emergency procedures

Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.	:	General measures
--	---	------------------

.1.1.6 For non-emergency personnel

No additional information available

.2.1.6 For emergency responders

No additional information available

Spilcare GC-27

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

.2.6 Environmental precautions

Prevent entry to sewers and public waters.

.3.6 Methods and material for containment and cleaning up

Absorb and/or contain spill with inert material (sand, vermiculite or other appropriate material), then place in suitable container. Do not flush into surface water or sewer system. : For containment
Wear recommended personal protective equipment.

Sweep or shovel spills into appropriate container for disposal. Provide ventilation. : Methods for cleaning up

.4.6 Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection".

SECTION 7 :Handling and storage

.1.7 Precautions for safe handling

Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray. Do not swallow. Handle and open container with care. When using do not eat, drink or smoke. : Precautions for safe handling

Wash contaminated clothing before reuse. Always wash hands after handling the product. : Hygiene measures

.2.7 Conditions for safe storage, including any incompatibilities

Keep out of the reach of children. Keep container tightly closed. Keep only in the original container in a cool well ventilated place. : Storage conditions

.3.7 Specific end use(s)

Not available.

SECTION 8 :Exposure controls/personal protection

.1.8 Control parameters

(107-41-5) Spilcare GC-27			
25 ppm (vapor fraction)		ACGIH TWA (ppm)	USA - ACGIH
10 mg/m ³ (inhalable particulate matter, aerosol only)		ACGIH STEL (mg/m ³)	USA - ACGIH
50 ppm (vapor fraction)		ACGIH STEL (ppm)	USA - ACGIH

.2.8 Exposure controls

:Appropriate engineering controls

Ensure good ventilation of the work station.

:Hand protection

Wear suitable gloves resistant to chemical penetration

:Eye protection

Wear eye/face protection

:Skin and body protection

Wear suitable protective clothing

:Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

:Environmental exposure controls

Avoid release to the environment.

:Other information

Handle in accordance with good industrial hygiene and safety procedures. Do not eat, drink or smoke when using this product.

SECTION 9 :Physical and chemical properties

.1.9 Information on basic physical and chemical properties

Liquid	:	Physical state
Clear. Solution.	:	Appearance
Light purple.	:	Colour
No data available	:	Odour
No data available	:	Odour threshold
7.02 (25 °C) (77 °F)	:	pH

Spilcare GC-27

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

No data available	:	Relative evaporation rate (butylacetate=1)
No data available	:	Melting point
No data available	:	Freezing point
No data available	:	Boiling point
> 100 °C (>212 °F) ASTM D 93	:	Flash point
No data available	:	Auto-ignition temperature
No data available	:	Decomposition temperature
Not flammable	:	Flammability (solid, gas)
No data available	:	Vapour pressure
No data available	:	Relative vapour density at 20 °C
1.019 (20 °C) (68 ° F) IS 488 part 32	:	Relative density
No data available	:	Solubility
No data available	:	Partition coefficient n-octanol/water
No data available	:	Viscosity, kinematic
No data available	:	Viscosity, dynamic
No data available	:	Explosive properties
No data available	:	Oxidising properties
No data available	:	Explosive limits

.2.9 Other information

No additional information available

SECTION 10 :Stability and reactivity

.1.10 Reactivity

No dangerous reactions known under normal conditions of use.

.2.10 Chemical stability

Stable under normal conditions.

.3.10 Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

.4.10 Conditions to avoid

Heat. Incompatible materials.

.5.10 Incompatible materials

Strong acids, strong bases, strong oxidizing agents and strong reducing agents.

.6.10 Hazardous decomposition products

May include, and are not limited to: oxides of carbon. Oxides of sodium.

SECTION 11 :Toxicological information

.1.11 Information on toxicological effects

Not classified.	:	Acute toxicity (oral)
Not classified.	:	Acute toxicity (dermal)
Not classified.	:	Acute toxicity (inhalation)

2,4-Pentanediol, 2-methyl- (107-41-5)

3700 mg/kg	LD50 oral rat
12300 mg/kg	LD50 dermal rabbit
> 310 mg/m ³ (Exposure time: 1 h)	LC50 inhalation rat
155 mg/l/4h	LC50 inhalation rat (Vapours - mg/l/4h)

1-Butoxy-2-propanol (5131-66-8)

1900 mg/kg	LD50 oral rat
------------	---------------

1.5% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral) : Unknown acute toxicity (CLP) - SDS
 11.5% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal)
 11.5% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Vapours))

Causes skin irritation.	:	Skin corrosion/irritation
7.02 (25 C) :pH		
Causes serious eye irritation.	:	Serious eye damage/irritation
7.02 (25 C) :pH		

Spilcare GC-27

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

	Not classified.	:	Respiratory or skin sensitisation
Based on available data, the classification criteria are not met.		:	Additional information
	Not classified.	:	Germ cell mutagenicity
Based on available data, the classification criteria are not met.		:	
	Not classified.	:	Carcinogenicity
Based on available data, the classification criteria are not met.		:	Additional information
	Not classified.	:	Reproductive toxicity
Based on available data, the classification criteria are not met.		:	Additional information
	Not classified.	:	STOT-single exposure
Based on available data, the classification criteria are not met.		:	Additional information
	Not classified.	:	STOT-repeated exposure
Based on available data, the classification criteria are not met.		:	Additional information
	Not classified.	:	Aspiration hazard
Based on available data, the classification criteria are not met.		:	Additional information
Likely routes of exposure: ingestion, inhalation, skin and eye.		:	Other information

SECTION 12 :Ecological information

.1.12 Toxicity

May cause long-term adverse effects in the aquatic environment. : Ecology - general

2,4-Pentanediol, 2-methyl- (107-41-5)

10500 – 11000 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])	LC50 fish 1
10000 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])	LC50 fish 2
2700 – 3700 mg/l (Exposure time: 48 h - Species: Daphnia magna)	EC50 Daphnia 1

Diphosphoric acid, tetrapotassium salt (7320-34-5)

> 100 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)	LC50 fish 1
> 100 mg/l (Exposure time: 48 h - Species: water flea)	EC50 Daphnia 1

Contains 10.55 % of components with unknown hazards to the aquatic environment : Unknown hazards to the aquatic environment (CLP)

.2.12 Persistence and degradability

Spilcare GC-27

Not established. Persistence and degradability

.3.12 Bioaccumulative potential

Spilcare GC-27

Not established. Bioaccumulative potential

2,4-Pentanediol, 2-methyl- (107-41-5)

< 0.14 Partition coefficient n-octanol/water

.4.12 Mobility in soil

No additional information available

.5.12 Results of PBT and vPvB assessment

No additional information available

.6.12 Other adverse effects

No other effects known : Additional information

SECTION 13 :Disposal considerations

.1.13 Waste treatment methods

Dispose in a safe manner in accordance with local/national regulations. : Product/Packaging disposal recommendations

SECTION 14 :Transport information

In accordance with ADR

.1.14 UN number

Not applicable : UN-No. (ADR)

Spilcare GC-27

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

.2.14 UN proper shipping name	
Not applicable	: Proper Shipping Name (ADR)
.3.14 Transport hazard class(es)	
ADR	
Not applicable	: Transport hazard class(es) (ADR)
.4.14 Packing group	
Not applicable	: Packing group (ADR)
.5.14 Environmental hazards	
No	: Dangerous for the environment
No supplementary information available.	: Other information
.6.14 Special precautions for user	
Do not handle until all safety precautions have been read and understood.	: Special transport precautions
Overland transport -	
Not applicable	
.7.14 Transport in bulk according to Annex II of Marpol and the IBC Code	
Not applicable	

SECTION 15 :Regulatory information

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

.1.1.15 EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no REACH candidate substance.

Contains no REACH Annex XIV substances

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Directive 2012/18/EU (SEVESO III)

.2.1.15 National regulations

Germany

No additional information available

.2.15 Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16 :Other information

:Indication of changes

None.

:Abbreviations and acronyms

°C – Degrees Celsius °F – Degrees Fahrenheit ADR – European Agreement concerning the International Carriage of Dangerous Goods by Road. ACGIH – American Conference of Governmental Industrial Hygienists ATE – Acute Toxicity Estimate BCF – Bioconcentration Factor BEI – Biological Exposure Index CAS – Chemical Abstracts Service CLP – Regulation (EC) No 1272/2008 on the Classification, Labeling and Packaging of substances and mixtures. cP – centipoise (unit of dynamic viscosity) cSt – centistokes (unit of kinematic viscosity) DNEL – Derived No-effect Level EC50 – Half maximal effective concentration ECHA – European Chemicals Agency EC-No. – European Community number EU – European Union GHS – Globally Harmonized System of Classification and Labelling of Chemicals	
--	--

Spilcare GC-27

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

<p>h – Hours IATA – International Air Transport Association IDLH – Immediately Dangerous to Life or Health IMDG – International Maritime Dangerous Goods IOELV – Indicative Occupational Exposure Limit Value kPa – kilopascal Kow – Octanol-Water Partition Coefficient LC50 – Median Lethal Concentration LD50 – Median Lethal Dose mg/l – Milligram per liter mg/kg – Milligram per kilogram mg/m³ – Milligram per cubic meter Min – Minutes NIOSH – National Institute for Occupational Safety and Health NOEC – No Observed Effect Concentration N.O.S. – Not Otherwise Specified OEL – Occupational Exposure Limit PBT - Persistent, Bioaccumulative and Toxic ppm – Parts per million PVC – Polyvinyl chloride REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006 RID – European Agreement concerning the International Carriage of Dangerous Goods by Rail SDS – Safety Data Sheet STEL – Short Term Exposure Limit TLV – Threshold Limit Value TWA – Time Weighted Average UN – United Nations vPvB - Very Persistent and Very Bioaccumulative</p>	
--	--

REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006. : Data sources



None. : Other information
Nexreg Compliance Inc. : Prepared by
www.Nexreg.com

: Classification according to Regulation (EC) No. 1272/2008 [CLP]

H315	Skin Irrit. 2
H319	Eye Irrit. 2

:Full text of H- and EUH-statements

Acute toxicity (oral), Category 4	Acute Tox. 4 (Oral)
Serious eye damage/eye irritation, Category 2	Eye Irrit. 2
Skin corrosion/irritation, Category 2	Skin Irrit. 2
Harmful if swallowed.	H302
Causes skin irritation.	H315
Causes serious eye irritation.	H319

:Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]

Calculation method	Skin Irrit. 2
Calculation method	Eye Irrit. 2

SDS EU (REACH Annex II) - Right-to-left - Nexreg

Disclaimer: We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for the user's own particular use.