

U.S.A.

WL1; WL5; WL55 Page 1 of 11

Scale Remover

SDS Revision Date (mm/dd/yyyy): 04/17/2015

SAFETY DATA SHEET

SECTION 1. IDENTIFICATION

Product identifier used on the label

: Scale Remover

Product Code(s) : WL1 (P/N 475084); WL5 (P/N 475087); WL55 (P/N 475089)

Recommended use of the chemical and restrictions on use

: Professional Use Only: Refrigeration coil scale remover cleaner.

Refer to supplier

Name, address, and telephone number of

Chemical family : Mixture.

Name, address, and telephone number

of the supplier: the manufacturer:

Parker Hannifin Corporation - Sporlan Division

206 Lange Drive Washington, MO, U.S.A.

63090

Supplier's Telephone # : (636)-239-1111

24 Hr. Emergency Tel # : Chemtrec 1-800-424-9300 (Within Continental U.S.); Chemtrec 703-527-3887

(Outside U.S.).

SECTION 2. HAZARDS IDENTIFICATION

Classification of the chemical

WHMIS information: This product is a WHMIS Controlled Product. It meets one or more of the criteria for a controlled product provided in Part IV of the Canadian Controlled Products Regulations (CPR). WHMIS classification:

Class D1A (Materials Causing Immediate and Serious Toxic Effects, Very Toxic Material)

Class E (Corrosive Material)

OSHA: This material is classified as hazardous under OSHA regulations (29CFR 1910.1200) (Hazcom 2012). OSHA Classification:

Corrosive to metals: Category 1 Acute Toxicity, oral - Category 4 Eye damage/irritation: Category 1 Skin corrosion/irritation: Category 1

Specific target organ toxicity - single exposure Category 3

Label elements

The following label information is applicable only to the United States according to OSHA Regulations (29 CFR

Signal Word

DANGER!

Hazard statement(s)

May be corrosive to metals.

1910.1200) (Hazcom 2012):

Harmful if swallowed.

Causes severe skin burns and eye damage.

May cause respiratory irritation.

Scale Remover

WL1; WL5; WL55

Page 2 of 11

SDS Revision Date (mm/dd/yyyy): 04/17/2015

SAFETY DATA SHEET

Precautionary statement(s)

Keep only in original container.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

Do not breathe mists.

Use only outdoors or in a well-ventilated area.

Wear protective gloves/clothing and eye/face protection.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Do NOT induce vomiting.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

Wash contaminated clothing before reuse.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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

Immediately call a POISON CENTER or doctor/physician.

Absorb spillage to prevent material damage.

Store in corrosive resistant container with a resistant inner liner.

Store locked up.

Store in a well-ventilated place. Keep container tightly closed.

Dispose of contents/container in accordance with local/regional/national/international regulations.





The following label information is applicable only to Canada according to the Canadian Controlled Products Regulations (CPR/WHMIS):

DANGER!

May be corrosive to metals. Contact with metals may release small amounts of flammable hydrogen gas. Corrosive material. May cause severe burns to all routes of exposure. May cause severe irritation to the nose, throat and respiratory tract. May be harmful if swallowed. May be harmful if inhaled.

Use in a well-ventilated area. Wear protective gloves/clothing and eye/face protection. Do not ingest. Do not breathe vapours or spray mist. Keep away from bases, metals and other incompatibles. Keep containers tightly closed when not in use. Wash thoroughly after handling.

IF INHALED: Remove person to fresh air and keep comfortable for breathing. If breathing stopped, begin artificial respiration. If breathing is difficult, administer oxygen. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTRE or doctor/physician.





Other hazards



Scale Remover WL1; WL5; WL55 Page 3 of 11

SDS Revision Date (mm/dd/yyyy): 04/17/2015

SAFETY DATA SHEET

Other hazards which do not result in classification:

Ingestion may cause severe irritation to the mouth, throat and stomach. Contact with metals may release small amounts of flammable hydrogen gas. Prolonged skin contact may cause dermatitis (rash), characterized by red, dry, itching skin. May cause respiratory tract irritation. Prolonged or repeated inhalation of fumes or vapours, may cause chronic lung effects, such as bronchitis, and tooth enamel erosion. Chronic skin contact with low concentrations may cause dermatitis.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS#	<u>Concentration</u>
Hydrogen chloride	7647-01-0	20.0 - 25.0
Tetradecyldimethylamine	112-75-4	0.5 - 1.5

SECTION 4. FIRST-AID MEASURES

Description of first aid measures

Ingestion : Do NOT induce vomiting. Have victim rinse mouth with water, then give one to two

glasses of water to drink. Seek immediate medical attention/advice. Never give

anything by mouth if victim is unconscious.

Inhalation Immediately remove person to fresh air. If breathing has stopped, give artificial

respiration. If breathing is difficult, give oxygen by qualified medical personnel only.

Seek immediate medical attention/advice.

Skin contact Take off all contaminated clothing immediately. Immediately flush skin with gently

flowing, running water for at least 20 minutes. Do not rub area of contact. Cover wound with sterile dressing. Seek immediate medical attention/advice. Wash contaminated clothing before reuse. Leather and shoes that have been contaminated with the

solution may need to be destroyed.

Eye contact Immediately flush eyes with running water for at least 20 minutes. Protect unharmed

eye. Seek immediate medical attention/advice.

Most important symptoms and effects, both acute and delayed

May cause serious eye irritation or damage. Symptoms may include redness, pain, tearing and conjunctivitis. Direct skin contact may cause corrosive skin burns, deep ulcerations and possibly permanent scarring. May cause severe irritation and corrosive damage in the mouth, throat and stomach. Symptoms may include abdominal pain, vomiting, burns, perforations, bleeding and eventually death. May cause severe irritation to the nose, throat and respiratory tract. Symptoms may include coughing, choking and wheezing. Could result in pulmonary edema (fluid accumulation). Symptoms of pulmonary edema (chest pain, shortness of breath) may be delayed. Prolonged or repeated inhalation of fumes or vapours, may cause chronic lung effects, such as bronchitis, and tooth enamel erosion.

Indication of any immediate medical attention and special treatment needed

: Immediate medical attention is required. Causes burns. Treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Water spray may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

Unsuitable extinguishing media

Do not use direct stream of water, which can result in a dust cloud and explosion hazard.

Special hazards arising from the substance or mixture / Conditions of flammability



WL1; WL5; WL55

Page 4 of 11

Scale Remover

SDS Revision Date (mm/dd/yyyy): 04/17/2015

SAFETY DATA SHEET

: Not considered flammable. Burning produces obnoxious and toxic fumes. Contact with metals may release small amounts of flammable hydrogen gas. Reacts violently with a wide variety of organic and inorganic chemicals including alcohol, carbides, chlorates, picrates, nitrates and metals.

Flammability classification (OSHA 29 CFR 1910.106)

: Non-flammable.

Explosion Data: Sensitivity to Mechanical Impact / Static Discharge:

: Not expected to be sensitive to mechanical impact or static discharge.

Hazardous combustion products

: Hydrogen chloride gas Chlorine Hydrogen Carbon oxides Nitrogen oxides

Special protective equipment and precautions for firefighters

Protective equipment for fire-fighters

: Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

Special fire-fighting procedures

: Firefighters should wear proper protective equipment and self-contained breathing apparatus with full face piece operated in positive pressure mode. A full-body chemical resistant suit should be worn. Move containers from fire area if safe to do so. Water spray may be useful in cooling equipment exposed to heat and flame. Dike for water control. Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

: All persons dealing with clean-up should wear the appropriate protective equipment including self-contained breathing apparatus. Keep all other personnel upwind and away from the spill/release. Restrict access to area until completion of clean-up. Refer to Section 8, EXPOSURE CONTROLS AND PERSONAL PROTECTION, for additional information on acceptable personal protective equipment.

Environmental precautions

Ensure spilled product does not enter drains, sewers, waterways, or confined spaces. For large spills, dike the area to prevent spreading.

Methods and material for containment and cleaning up

: Remove all sources of ignition. Ventilate area of release. Stop spill or leak at source if safely possible. Dike for water control. Neutralize with sodium bicarbonate or a mixture of soda ash/slaked lime. Contain and absorb spilled liquid with non-combustible, inert absorbent material (e.g. sand), then place absorbent material into a container for later disposal (see Section 13). Contact the proper local authorities.

Special spill response procedures

If a spill/release in excess of the EPA reportable quantity is made into the environment, immediately notify the national response center in the United States (phone: 1-800-424-8802).

US CERCLA Reportable quantity (RQ): Hydrochloric acid (5000 lbs / 2270 kg)

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling

: Use in a well-ventilated area. Wear protective gloves/clothing and eye/face protection. See Section 8 for additional personal protection advice when handling this product. Do not ingest. Avoid breathing vapour or mist. Avoid contact with skin, eyes and clothing. Keep away from extreme heat and flame. Keep away from bases, metals and other incompatibles. Keep container tightly closed when not in use. Keep only in original container. Wash thoroughly after handling.



Scale Remover WL1; WL5; WL55

SDS Revision Date (mm/dd/yyyy): 04/17/2015

Page 5 of 11

SAFETY DATA SHEET

Conditions for safe storage : Store in a cool, dry, well-ventilated area. Store locked up. Store away from

incompatibles and out of direct sunlight. Storage area should be clearly identified, clear of obstruction and accessible only to trained and authorized personnel. Inspect periodically for damage or leaks. Store in corrosion-resistant containers. Keep only in

original container.

Incompatible materials : Strong oxidizing agents; Metals (e.g. Aluminum, brass, copper) Alkalies Aldehydes

Reducing agents .

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits:							
Chemical Name	ACGIH	I TLV	OSHA PEL				
	<u>TWA</u>	STEL	<u>PEL</u>	<u>STEL</u>			
Hydrogen chloride	N/Av	N/Av	N/Av	N/Av			
Tetradecyldimethylamine	N/Av	N/Av	N/Av	N/Av			

Exposure controls

Ventilation and engineering measures

: Use general or local exhaust ventilation to maintain air concentrations below

recommended exposure limits.

Respiratory protection : If the TLV is exceeded, a NIOSH/MSHA-approved respirator is advised. Confirmation

of which type of respirator is most suitable for the intended application should be obtained from respiratory protection suppliers. Respirators should be selected based on the form and concentration of contaminants in air, and in accordance with OSHA

(29 CFR 1910.134) or CSA Z94.4-02.

Skin protection: Wear chemically protective gloves (impervious), boots, aprons, and gauntlets to

prevent prolonged or repeated skin contact. Wear impervious gloves, such as butyl rubber. Unsuitable material: polyvinyl alcohol. Advice should be sought from glove

suppliers.

Eye / face protection : Chemical splash goggles must be worn when handling this material. A full face shield

may also be necessary.

Other protective equipment : Other equipment may be required depending on workplace standards. An eyewash

station and safety shower should be made available in the immediate working area.

General hygiene considerations

: Avoid breathing vapour or mist. Avoid contact with skin, eyes and clothing. Do not eat, drink, smoke or use cosmetics while working with this product. Upon completion of work, wash hands before eating, drinking, smoking or use of toilet facilities. Remove and wash contaminated clothing before re-use. Do not take contaminated clothing

home.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Colourless to light yellow liquid.

Odour : Pungent odor.

Initial boiling point and boiling range

: 110°C (230°F)

Flash point : Not applicable.
Flashpoint (Method) : Not applicable.
Evaporation rate (BuAe = 1) : Negligible
Flammability (solid, gas) : Not applicable.



Scale Remover SDS Revision Date (mm/dd/yyyy): 04/17/2015 WL1; WL5; WL55

Page 6 of 11

SAFETY DATA SHEET

Lower flammable limit (% by vol.)

Not applicable.

Upper flammable limit (% by vol.)

Not applicable.

Oxidizing properties: None known.Explosive properties: Not explosiveVapour pressure: same as water

Vapour density : N/Av

Relative density / Specific gravity

: 1.1

Solubility in water : soluble
Other solubility(ies) : None known.

Partition coefficient: n-octanol/water or Coefficient of water/oil distribution

: N/Av

Auto-ignition temperature : N/Ap

Decomposition temperature: Not available.

Viscosity : N/Av
Volatiles (% by weight) : N/Av

Volatile organic Compounds (VOC's)

: Not available.

Absolute pressure of container

: N/Ap

Flame projection length : N/Ap

Other physical/chemical comments

: None.

SECTION 10. STABILITY AND REACTIVITY

Reactivity : Not normally reactive. Contact with metals may release small amounts of flammable

hydrogen gas. Corrosive in contact with metals

Chemical stability : Stable under the recommended storage and handling conditions prescribed.

Possibility of hazardous reactions

Hazardous polymerization does not occur. Contact with metals may release small

amounts of flammable hydrogen gas.

Conditions to avoid : Avoid heat and open flame. Ensure adequate ventilation, especially in confined areas.

Avoid contact with incompatible materials.

Incompatible materials : Strong oxidizing agents; Metals (e.g. Aluminum, brass, copper) Alkalies Aldehydes

Reducing agents .

Hazardous decomposition products

: None known, refer to hazardous combustion products in Section 5.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure:

Routes of entry inhalation : YES
Routes of entry skin & eye : YES
Routes of entry Ingestion : YES

Routes of exposure skin absorption

: NO





Scale Remover

WL1; WL5; WL55

Page 7 of 11

SDS Revision Date (mm/dd/yyyy): 04/17/2015

SAFETY DATA SHEET

Potential Health Effects:

Signs and symptoms of short-term (acute) exposure

Sign and symptoms Inhalation

: Inhalation of high concentrations of fumes or mists may cause severe irritation and corrosive damage to the nose, throat and upper respiratory tract. Symptoms may include coughing, choking and wheezing. Could result in pulmonary edema (fluid accumulation). Symptoms of pulmonary edema (chest pain, shortness of breath) may be delayed.

Sign and symptoms ingestion

: May cause severe irritation and corrosive damage in the mouth, throat and stomach. Symptoms may include abdominal pain, vomiting, burns, perforations, bleeding and

eventually death.

Sign and symptoms skin : This material is classified as hazardous under OSHA regulations (29CFR 1910.1200)

(Hazcom 2012). Classification: Skin corrosion/irritation: Category 1

Causes severe skin burns and eye damage. Direct skin contact may cause corrosive

skin burns, deep ulcerations and possibly permanent scarring.

: This material is classified as hazardous under OSHA regulations (29CFR 1910.1200) Sign and symptoms eyes

(Hazcom 2012). Classification: Eye damage/irritation: Category 1

Causes serious eye damage.

Potential Chronic Health Effects

: Chronic skin contact with low concentrations may cause dermatitis. Prolonged or repeated inhalation of fumes or vapours, may cause chronic lung effects, such as

bronchitis, and tooth enamel erosion.

Mutagenicity Not expected to be mutagenic in humans.

Carcinogenicity : No components are listed as carcinogens by ACGIH, IARC, OSHA or NTP.

Reproductive effects & Teratogenicity

: Not expected to cause reproductive effects.

Senitization to material

Irritancy

Not expected to be a skin or respiratory sensitizer.

Specific target organ effects

: Target Organs: Eyes, skin, respiratory system and digestive system.

This material is classified as hazardous under OSHA regulations (29CFR 1910.1200)

(Hazcom 2012). Classification:

Specific target organ toxicity - single exposure -Category 3

May cause respiratory irritation.

The substance or mixture is not classified as specific target organ toxicant, repeated

exposure. Corrosive.

Medical conditions aggravated by overexposure

: Pre-existing skin, eye and respiratory disorders.

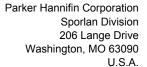
Synergistic materials : Not available.

Toxicological data : The calculated ATE values for this mixture are:

ATE oral = 958.03

ATE inhalation (mists) = 23.55

	LCso(4hr)	LD50			
Chemical name	inh, rat	(Oral, rat) (Rabbit, de			
Hydrogen chloride	1.05 1.175 mg/L	238-277 mg/kg	5010 mg/kg		
Tetradecyldimethylamine	N/Av	N/Av	N/Av		





Scale Remover

WL1; WL5; WL55

Page 8 of 11

SDS Revision Date (mm/dd/yyyy): 04/17/2015

SAFETY DATA SHEET

Other important toxicological hazards

: None known or reported by the manufacturer.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

: Because of the low pH of this product, it would be expected to produce significant ecotoxicity upon exposure to aquatic organisms and aquatic systems. The product should not be allowed to enter drains or water courses, or be deposited where it can affect ground or surface waters.

Ecotoxicity data:

<u>Ingredients</u>	CACNI	Toxicity to Fish				
	CAS No	LC50 / 96h	NOEC / 21 day	M Factor		
Hydrogen chloride	ydrogen chloride 7647-01-0		n/av	None.		

<u>Ingredients</u>	CAS No	Toxicity to Daphnia				
		EC50 / 48h	NOEC / 21 day	M Factor		
Hydrogen chloride	7647-01-0	n/av	n/av	None.		

<u>Ingredients</u>	CAS No	Toxicity to Algae				
		EC50 / 96h or 72h	NOEC / 96h or 72h	M Factor		
Hydrogen chloride	7647-01-0	0.492 mg/L/72 hours (Green algea)	n/av	None.		

Persistence and degradability

: Biodegradation is not applicable to inorganic materials.

Bioaccumulation potential

: No data is available on the product itself.

Mobility in soil

No data is available on the product itself.

Other Adverse Environmental effects

: No additional information.

SECTION 13. DISPOSAL CONSIDERATIONS

Handling for Disposal

: Handle waste according to recommendations in Section 7. Empty containers retain residue (liquid and/or vapour) and can be dangerous.

Methods of Disposal

: Dispose in accordance with all applicable federal, state, provincial and local

regulations.

RCRA

: If this product, as supplied, becomes a waste in the United States, it may meet the criteria of a hazardous waste as defined under RCRA, Title 40 CFR 261. It is the responsibility of the waste generator to determine the proper waste identification and disposal method. For disposal of unused or waste material, check with local, state and federal environmental agencies.

SECTION 14. TRANSPORTATION INFORMATION								
Regulatory Information	UN Number	UN proper shipping name	Transport hazard class(es)	Packing Group	Label			



Scale Remover

SDS Revision Date (mm/dd/yyyy): 04/17/2015

WL1; WL5; WL55 Page 9 of 11

SAFETY DATA SHEET

49CFR/DOT	UN1760	Corrosive liquid, n.o.s. (Hydrochloric acid)	8	II	8
49CFR/DOT Additional information	May be shipp	ped as a limited quantity in receptacles not exceeding 1.0 Liters, a	according to 49 CFR	173.154.	· · · · · · · · · · · · · · · · · · ·
TDG	UN1760	CORROSIVE LIQUID, N.O.S. (Hydrochloric acid)	8	II	S S S S S S S S S S S S S S S S S S S
TDG Additional information					
ICAO/IATA	UN1760	Corrosive liquid, n.o.s. (Hydrochloric acid)	8	II	8
ICAO/IATA Additional information	:	1			

Special precautions for user : None known.

Environmental hazards : See ECOLOGICAL INFORMATION, Section 12.

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

: Not applicable.

SECTION 15 - REGULATORY INFORMATION

US Federal Information:

Components listed below are present on the following U.S. Federal chemical lists:

<u>Ingredients</u>		TSCA	CERCLA Reportable	SARA TITLE III: Sec. 302, Extremely	SARA TITLE III: Sec. 313, 40 0 372, Specific Toxic Chemic	
	CAS # Inventory	Inventory	Quantity(RQ) (40 CFR 117.302):	Hazardous Substance, 40 CFR 355:	Toxic Chemical	de minimus Concentration
Hydrogen chloride	7647-01-0	Yes	5000 lb/ 2270 kg	500 lb TPQ (gas only)	Yes	1%
Tetradecyldimethylamine	112-75-4	Yes	N/Ap	N/Av	No	N/Ap

SARA TITLE III: Sec. 311 and 312, MSDS Requirements, 40 CFR 370 Hazard Classes: Acute Health Hazard. Chronic Health Hazard

Under SARA Sections 311 and 312, the EPA has established threshold quantities for the reporting of hazardous chemicals. The current thresholds are 500 pounds for the threshold planning quantity (TPQ), whichever is lower, for extremely hazardous substances and 10,000 pounds for all other hazardous chemicals.

US State Right to Know Laws:

The following chemicals are specifically listed by individual States:

<u>Ingredients</u>	CAS#	California Proposition 65		State "Right to Know" Lists					
	GAG II	Listed	Type of Toxicity	CA	MA	MN	NJ	PA	RI
Hydrogen chloride	7647-01-0	No	N/Ap	Yes	Yes	Yes	Yes	Yes	Yes
Tetradecyldimethylamine	112-75-4	No	N/Ap	No	No	No	No	No	No



Scale Remover

WL1; WL5; WL55 Page 10 of 11

SDS Revision Date (mm/dd/yyyy): 04/17/2015

SAFETY DATA SHEET

Canadian Information:

Canadian Environmental Protection Act (CEPA) information: All ingredients listed appear on the Domestic Substances List (DSL).

WHMIS information: Refer to Section 2 for a WHMIS Classification for this product.

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

International Information:

Components listed below are present on the following International Inventory list:

<u>Ingredients</u>	CAS#	European EINECs	Australia AICS	Philippines PICCS	Japan ENCS	Korea KECI/KECL	China IECSC	NewZealand IOC
Hydrogen chloride	7647-01-0	231-595-7	Present	Present	(1)-215	KE-20189	Present	HSR004090
Tetradecyldimethylamine	112-75-4	204-002-4	Present	Present	No information available.	No information available.	Present	No information available.

SECTION 16. OTHER INFORMATION

Legend

: ACGIH: American Conference of Governmental Industrial Hygienists

CA: California

CAS: Chemical Abstract Services

CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act

of 1980

CFR: Code of Federal Regulations DOT: Department of Transportation EPA: Environmental Protection Agency

HMIS: Hazardous Materials Identification System HSDB: Hazardous Substances Data Bank

IARC: International Agency for Research on Cancer

Inh: Inhalation

IUCLID: International Uniform Chemical Information Database

MA: Massachusetts MN: Minnesota

MSHA: Mine Safety and Health Administration

N/Ap: Not Applicable N/Av: Not Available

NFPA: National Fire Protection Association

NIOSH: National Institute of Occupational Safety and Health

NJ: New Jersey

NTP: National Toxicology Program

OSHA: Occupational Safety and Health Administration

PA: Pennsylvania

PEL: Permissible exposure limit

RCRA: Resource Conservation and Recovery Act

RI: Rhode Island

RTECS: Registry of Toxic Effects of Chemical Substances SARA: Superfund Amendments and Reauthorization Act

STEL: Short Term Exposure Limit

TDG: Canadian Transportation of Dangerous Goods Act & Regulations

TLV: Threshold Limit Values TWA: Time Weighted Average

WHMIS: Workplace Hazardous Materials Identification System



Scale Remover WL1; WL5; WL55

SDS Revision Date (mm/dd/yyyy): 04/17/2015

Page 11 of 11

SAFETY DATA SHEET

References : Canadian Centre for Occupational Health and Safety, CCInfoWeb Databases, 2015

(Chempendium, RTECs, HSDB, INCHEM).

European Chemicals Agency, Classification Legislation, 2015

Material Safety Data Sheet from manufacturer

OECD- The Global Portal to Information on Chemical Substances - eChemPortal,

2015

Preparation Date (mm/dd/yyyy)

: 05/29/2012

Reviewed Date SDS (dd/mm/yyyy)

: 17/04/2015

Revision No. : 2

Revision Information : All (format change)

Other special considerations for handling

Provide adequate information, instruction and training for operators.

HMIS Rating : *- Chronic hazard 0 - Minimal 1 - Slight 2 - Moderate 3 - Serious 4 - Severe

Health: 3 Flammability: 0 Reactivity: 0

NFPA Rating 0 - Minimal 1 - Slight 2 - Moderate 3 - Serious 4 - Severe

: Health: 3 Flammability: 0 Instability: 0 Special Hazards: None.

Prepared for:

Parker Hannifin Corporation - Sporlan Division 206 Lange Drive, Washington, MO, U.S.A. 63090

Telephone: (636) 239-1111

www.parker.com

Direct all enquiries to: Parker Hannifin Corp. - Sporlan

Division.

Prepared by:

ICC The Compliance Center Inc.

Telephone: (888) 442-9628 (U.S.): (888) 977-4834 (Canada)

http://www.thecompliancecenter.com





DISCLAIMER

This Material Safety Data Sheet was prepared by ICC The Compliance Center Inc. using information provided by / obtained from Parker Hannifin Corp and CCOHS' Web Information Service. The information in the Material Safety Data Sheet is offered for your consideration and guidance when exposed to this product. ICC The Compliance Center Inc and Parker Hannifin Corp expressly disclaim all expressed or implied warranties and assume no responsibilities for the accuracy or completeness of the data contained herein. The data in this MSDS does not apply to use with any other product or in any other process.

This Material Safety Data Sheet may not be changed, or altered in any way without the expressed knowledge and permission of ICC The Compliance Center Inc. and Parker Hannifin Corp.

END OF DOCUMENT