SDS Number: 00077019004

4174

Revision Date: 6/19/2015



Safety Data Sheet

24 Hour Emergency Phone Numbers Medical/Poison Control:

In U.S.: Call 1-800-222-1222

Outside U.S.: Call your local poison

control center
Transportation/National Response

Center: 1,800,535,5053

1-800-535-5053 1-352-323-3500

NOTE: The National ResponseCenter emergency numbers to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals.

IMPORTANT: Provide this information to employees, customers, and users of this product. Read this SDS before handling or disposing of this product. This product is covered by the OSHA Hazard Communication Standard and this document has been prepared in accordance with requirements of this standard. All abbreviated terms used in this MSDS are further described in Section 16.

1. Identification

This Safety Data Sheet is available in American Spanish upon request. Los Datos de Serguridad pueden obtenerse en Espanol si lo riquiere.

Product Name:

Clear Flexible Sealant

Revision Date:

6/19/2015

Product UPC Number:

18376, 18376

Supercedes Date:

New SDS

Product Use/Class:

Caulking Compound

SDS No:

00077019004

Manufactured For

DAP Products Inc.

2400 Boston Street Suite 200 Baltimore, MD 21224-4723

888-327-8477 (non - emergency matters)

Preparer:

Regulatory Department

2. Hazards Identification

EMERGENCY OVERVIEW: DANGER!Flammable liquid and vapor. Vapors may cause flash fire or explosion. Vapors can form an ignitable mixture with air. Vapors can flow along surfaces to a distant ignition source and flash back. Do not smoke. Extinguish all flames and pilot lights, and turn off stoves, heaters, electric motors and other sources of ignition during use and until all vapors are gone. Keep container closed and away from heat, sparks, and open flame. Store away from caustics and oxidizers. Avoid breathing vapor. Avoid skin and eye contact. May cause eye, skin, nose, throat and respiratory tract irritation. Use only with adequate ventilation. Prevent build-up of vapors by opening all windows and doors to achieve cross-ventilation. Harmful or fatal if swallowed. May affect the brain or nervous system causing dizziness, headache or nausea.

Revision Date: 6/19/2015

GHS Classification

Acute Tox. 4 Inhalation, Flam. Liq. 3, Skin Irrit. 2

Symbol(s) of Product



Signal Word

Warning

Possible Hazards

3% of the mixture consists of ingredients of unknown acute toxicity

GHS HAZARD STATEMENTS

Flammable Liquid, category 3 H226 Flammable liquid and vapour.

Skin Irritation, category 2 H315 Causes skin irritation.

Acute Toxicity, Inhalation, category 4 H332 Harmful if inhaled.

GHS LABEL PRECAUTIONARY STATEMENTS

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

smoking.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

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

P312 Call a POISON CENTER or doctor/physician if you feel unwell.

P362 Take off contaminated clothing.

GHS SDS PRECAUTIONARY STATEMENTS

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical/ventilating/lighting/.../ equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

3. Composition/Information on Ingredients

Chemical Name	CAS-No.	Wt. % GH	IS Symbols	GHS Statements
Hydrogenated petroleum resin	69430-35-9	25-50 GH		H270
Xylenes	1330-20-7	25-50 GH	IS02-GHS03-	H226-270-312-315-332
		GH	IS07	
Ethyl benezene	100-41-4	2.5-10 GHS	IS02-GHS03-	H225-270-332
		GH	IS07	
Bis(1,2,2,6,6-pentamethyl).seb	41556-26-7	1.0-2.5 GHS	IS03	H270
Methyl(1,2,2,6,6-penta)seb	82919-37-7	1.0-2.5 GHS	IS03	H270

The text for GHS Hazard Statements shown above (if any) is given in the "Other information" Section.

4. First-aid Measures

FIRST AID - INHALATION: If inhaled, remove to fresh air. If breathing is difficult, leave the area to obtain fresh air. If continued breathing difficulty is experienced, get medical attention immediately. NOTE: Only trained personnel should administer artificial respiration or give oxygen.

FIRST AID - SKIN CONTACT: Wash skin with soap and water for 15 minutes. Get medical aid if symptoms persist. Remove and wash contaminated clothing.

FIRST AID - EYE CONTACT: If material gets into eyes, flush with water immediately for 15 minutes. Consult a physician.

FIRST AID - INGESTION: If swallowed, DO NOT INDUCE VOMITING. Get medical attention immediately.

5. Fire-fighting Measures

UNUSUAL FIRE AND EXPLOSION HAZARDS: Eliminate sources of ignition: heat, electrical equipment, sparks and flames. Vapors can form an ignitable mixture with air. Vapors can flow along surfaces to a distant ignition source and flash back. Vapors may form explosive mixtures with air. Containers may explode if exposed to extreme heat. Empty containers retain product residue (liquid and/or vapor). Vapor can ignite potentially causing an explosion.

SPECIAL FIREFIGHTING PROCEDURES: Wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent) and full protective gear. Use water spray to cool exposed surfaces,

EXTINGUISHING MEDIA: Carbon Dioxide, Dry Chemical, Foam

Accidental Release Measures

ENVIRONMENTAL MEASURES: No Information

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: NOTE: Review fire hazards before proceeding with clean up. Immediately eliminate sources of ignition. Keep people away from and upwind of spill/leak. Scrape up dried material and place into containers. Prevent product from entering drains. Soak up with inert absorbent material and dispose of as hazardous waste. Read all product instructions before using. Personal protective equipment should include impervious gloves, protective eye wear, and suitable work clothes.

7. Handling and Storage

HANDLING: KEEP OUT OF REACH OF CHILDRENIDO NOT TAKE INTERNALLY. Remove all sources of ignition. Keep away from open flames, hot surfaces and sources of ignition. Provide adequate ventilation. Avoid heat, sparks and open flames. Wear appropriate personal protection. Avoid breathing vapor and contact with eyes, skin and clothing. Use in well ventilated area. Open all windows and doors or use other means to ensure cross-ventilation and fresh air entry during application and drying. Odor is not an adequate warning for hazardous conditions. Empty containers retain product residue (liquid and/or vapor). Vapor can ignite potentially causing an explosion. Wash thoroughly after handling. Do not use in areas where static sparks may be generated.

STORAGE: Store away from sources of ignition and heat. Do not store at temperatures above 120 degrees F. Store containers away from excessive heat and freezing. Store away from caustics and oxidizers. Keep containers tightly closed.

8. Exposure Controls/Personal Protection

Ingredients with Occupational Exposure Limits

Chemical Name	ACGIH TLV-TWA	ACGIH-TLV STEL	OSHA PEL-TWA	OSHA PEL-CEILING
Hydrogenated petroleum resin	N.E.	N.E.	N.E.	N.E.
Xylenes	100 ppm TWA	150 ppm STEL	100 ppm TWA, 43 mg/m3 TWA	5 N.E.
Ethyl benezene	20 ppm TWA	N.E.	100 ppm TWA, 43 mg/m3 TWA	5 N.E.
Bis(1,2,2,6,6-pentamethyl).seb	N.E.	N.E.	N.E.	N.E.
Methyl(1,2,2,6,6-penta)seb	N.E.	N.E.	N.E.	N.E.

Further Advice: MEL = Maximum Exposure Limit OES = Occupational Exposure Standard SUP = Supplier's Recommendation Sk = Skin Sensitizer N.E. = Not Established

Personal Protection



RESPIRATORY PROTECTION: A NIOSH-approved air purifying respirator with an organic vapor cartridge or canister may be necessary under certain circumstances where airborne concentrations are expected to exceed exposure limits. If concentrations exceed the exposure limits specified, use of a NIOSH-approved supplied air respirator is recommended. Where the protection factor is exceeded, use of a Self Contained Breathing Apparatus (SCBA) may be necessary. If you experience eye watering, headache or dizziness or if air monitoring demonstrates vapor/mist levels are above applicable limits, wear and appropriate, properly fitted respirator (NIOSH approved) during and after application. A respiratory protection program that meets the OSHA 1910.134 and ANSI Z88.2 requirements must be

SDS Number: 00077019004



Revision Date: 6/19/2015



SKIN PROTECTION: Solvent-resistant gloves.



EYE PROTECTION: Goggles or safety glasses with side shields.

followed whenever workplace conditions warrant a respirator's use.



OTHER PROTECTIVE EQUIPMENT: Provide eyewash and solvent impervious apron if body contact may occur.



HYGIENIC PRACTICES: Remove and wash contaminated clothing before re-use.

Physical and Chemical Properties

Appearance:

Clear

Physical State:

Paste

Odor:

Strong Solvent

Odor Threshold:

Not Established

Density, g/cm3:

0.89 - 0.89

pH:

Not Applicable

Freeze Point. °C:

Not Established

Viscosity (mPa.s):

Not Established

Solubility in Water:

Not Established

Partition Coeff., n-octanol/water:

Not Established

Decomposition Temperature, °C:

Not Established

Explosive Limits, %:

N.I. - N.I.

Boiling Range, °C: Minimum Flash Point, °C: N.I. - N.I. 27.2

Auto-Ignition Temperature, °C Vapor Pressure, mmHg:

Not Established

Evaporation Rate:

Faster Than n-Butyl Acetate

Flash Method:

No Information Seta Closed Cup

Vapor Density:

Heavier Than Air

Flammability:

No Information

Combustibility:

Does not support combustion

(See "Other information" Section for abbreviation legend)

(If product is an aerosol, the flash point stated above is that of the propellant.)

10. Stability and Reactivity

STABILITY: Stable under normal conditions.

CONDITIONS TO AVOID: Keep away from open flames, hot surfaces and sources of ignition. Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions. Do not smoke.

INCOMPATIBILITY: Open flames, hot surfaces and sources of ignition. Keep away from strong oxidizing agents, heat and open flames. Strong acids and strong bases.

HAZARDOUS DECOMPOSITION PRODUCTS: Normal decomposition products, i.e., COx, NOx.

11. Toxicological Information

EFFECT OF OVEREXPOSURE - INHALATION: Inhalation of vapors may cause irritation of the nose, throat, lungs and respiratory tract. Inhalation of vapors in high concentration may cause shortness of breath (lung edema). Prolonged, repeated or high exposures may cause central nervous system depression leading to headaches, nausea, drowsiness, dizziness, and possibly narcosis. In extreme cases, may cause loss of consciousness.

EFFECT OF OVEREXPOSURE - SKIN CONTACT: May cause skin irritation. Prolonged and repeated skin contact may cause dermatitis, drying and defatting due to the solvent properties.

EFFECT OF OVEREXPOSURE - EYE CONTACT: May cause eye irritation.

EFFECT OF OVEREXPOSURE - INGESTION: Harmful or fatal if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. May cause gastrointestinal disturbances with dizziness and central nervous system depression. If ingested, may cause depressed respiration.

CARCINOGENICITY: No Information

Revision Date: 6/19/2015

EFFECT OF OVEREXPOSURE - CHRONIC HAZARDS: Prolonged or repeated contact with skin can cause defatting of the skin, which may lead to dermatitis. Prolonged or repeated inhalation of solvent vapors may cause irregular heartbeat. NOTICE: Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Symptoms include: loss of memory, loss of intellectual ability and loss of coordination. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

PRIMARY ROUTE(S) OF ENTRY: Eye Contact, Inhalation, Skin Contact

Acute Toxicity Values

The acute effects of this product have not been tested. Data on individual components are tabulated below

<u>CAS-No.</u> 69430-35-9	<u>Chemical Name</u> Hydrogenated petroleum resin	Oral LD50 >7000 mg/kg Rat	Dermal LD50 >2000 mg/kg Rat	Vapor LC50 >20 mg/kg
1330-20-7	Xylenes	4300 mg/kg Rat	1700 mg/kg Rabbit	47635 mg/L Rat
100-41-4	Ethyl benezene	3500 mg/kg Rat	15354 mg/kg Rabbit	17.2 mg/L Rat
41556-26-7	Bis(1,2,2,6,6-pentamethyl).seb	2615 mg/kg Rat	N.I.	N.I.
82919-37-7	Methyl(1,2,2,6,6-penta)seb	N.I.	N.I.	N.I.

N.I. = No Information

12. Ecological Information

ECOLOGICAL INFORMATION: Ecological injuries are not known or expected under normal use.

13. Disposal Information

DISPOSAL INFORMATION: Residues and spilled material are hazardous waste due to ignitability. Dispose of material in accordance with all federal, state and local regulations. State and Local regulations/restrictions are complex and may differ from Federal regulations. Responsibility for proper waste disposal is with the owner of the waste. Liquids cannot be disposed of in a landfill. Do not flush into surface water or sanitary sewer system. Do not empty into drains. Do not re-use empty containers. The container for this product can present explosion or fire hazards, even when emptied. To avoid risk of injury, do not cut, puncture, or weld on or near this container.

14. Transport Information

SPECIAL TRANSPORT PRECAUTIONS: No Information

DOT UN/NA Number: UN1133

DOT Proper Shipping Name: Adhesives, containing a flammable liquid

DOT Technical Name: N.A. **DOT Hazard Class:** 3 Hazard SubClass: N.A. Packing Group: Ш

Revision Date: 6/19/2015

15. Regulatory Information

U.S. Federal Regulations:

CERCLA - SARA Hazard Category

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Fire Hazard, Acute Health Hazard, Chronic Health Hazard

SARA SECTION 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

Chemical Name

CAS-No.

Xylenes

1330-20-7

Ethyl benezene

100-41-4

TOXIC SUBSTANCES CONTROL ACT:

All ingredients in this product are either on TSCA inventory list, or otherwise exempt.

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

No TSCA 12(b) components exist in this product.

CALIFORNIA PROPOSITION 65 CARCINOGENS AND REPORODUCTIVE TOXINS

CALIFORNIA PROPOSITION 65: No Information

International Regulations: As follows -

CANADIAN WHMIS:

This SDS has been prepared in compliance with Controlled Product Regulations except for the use of the 16 headings.

WHMIS Class

Consumer Commodity

16. Other Information

Revision Date:

6/19/2015

Supersedes Date:

New MSDS

Reason for revision:

HazCom2012/GHS Conversion

Datasheet produced by:

Regulatory Department

HMIS Ratings:

Health:	2	Flammability:	2	Reactivity:	0	Personal Protection:	Х

VOC Less Water Less Exempt Solvent, g/L331.9

VOC Material, g/L:332

VOC as Defined by California Consumer Product Regulation, Wt/Wt%:37.0

Text for GHS Hazard Statements shown in Section 3 describing each ingredient:

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H270	May cause or intensify fire; oxidiser.
H312	Harmful in contact with skin

SDS Number: 00077019004 Revision Date: 6/19/2015

H315 Causes skin irritation. H332 Harmful if inhaled.

Icons for GHS Pictograms shown in Section 3 describing each ingredient:



Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

DAP believes the data and statements contained herein are accurate as of the date hereof. They are offered in good faith as typical values and not as a product specification. NO WARRANTY OF MERCHANTABILITY, WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, IS MADE WITH REGARD TO THE INFORMATION HEREIN PROVIDED OR THE PRODUCT TO WHICH THE INFORMATION REFERS. Since this document is intended only as a guide to the appropriate use and precautionary handling of the referenced product by a properly trained person, it is therefore the responsibility of the user to (i) review the recommendations with due consideration for the specific context of the intended use and (ii) determine if they are appropriate.





Version: 1.5

Revision Date: 08/11/2017

PFC401CLR 5TG

SAFETY DATA SHEET

1. Identification

Product identifier: PFC401CLR 5TG

Other means of identification

Synonyms:

Acrylic Caulk

Recommended use and restriction on use

Recommended use: For industrial use only.

Restrictions on use: Not known.

Manufacturer/Importer/Distr :

Momentive Performance Materials LLC

260 Hudson River Road

Waterford NY 12188

Contact person

ibutor Information

commercial.services@momentive.com

Telephone

General information

+1-800-295-2392

Emergency telephone

number

Supplier

CHEMTREC

1-800-424-9300

2. Hazard(s) identification

Hazard Classification

Not classified

Label Elements

Hazard Symbol:

No symbol

Signal Word:

No signal word.

Hazard Statement:

not applicable

Precautionary

Statements

not applicable



Version: 1.5

Revision Date: 08/11/2017

PFC401CLR 5TG

Other hazards which do not result in GHS classification:

None.

3. Composition/information on ingredients

Mixtures

Composition Comments:

The components are not hazardous or are below required disclosure limits.

4. First-aid measures

General information:

No action shall be taken involving any personal risk or without suitable

training.

Ingestion:

If swallowed, do NOT induce vomiting. Give a glass of water.

Inhalation:

If inhaled, remove to fresh air. If not breathing give artificial respiration using a barrier device. If breathing is difficult give oxygen. Get medical

attention.

Skin Contact:

Wash area with soap and water.

Eye contact:

In case of contact with eyes, rinse immediately with plenty of water and

seek medical advice.

Most important symptoms/effects, acute and delayed

Symptoms:

No data available.

Hazards:

No data available.

Indication of immediate medical attention and special treatment needed

Treatment:

Treatment is symptomatic and supportive.

5. Fire-fighting measures

General Fire Hazards:

Move containers from fire area if you can do so without risk. Use standard

firefighting procedures and consider the hazards of other involved

materials.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media:

All standard extinguishing agents are suitable.

SDS_US



Version: 1.5

Revision Date: 08/11/2017

PFC401CLR 5TG

Unsuitable extinguishing media:

No data available.

Specific hazards arising from the chemical:

In case of fire, carbon monoxide and carbon dioxide may be formed.

Special protective equipment and precautions for firefighters

Special fire fighting procedures:

Cool fire-endangered containers with water.

Special protective equipment for fire-fighters:

Firefighters must wear NIOSH/MSHA approved positive pressure selfcontained breathing apparatus with full face mask and full protective clothing.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Avoid contact with skin and eyes. Avoid accidental ingestion of this material. Wash hands and face before eating, drinking, smoking, using toilet facilities, or applying cosmetics.

Keep container tightly closed. Keep out of reach of children.

Methods and material for containment and cleaning up:

Wipe, scrape or soak up in an inert material and put in a container for disposal. Wash walking surfaces with detergent and water to reduce slipping hazard. Wear proper protective equipment as specified in the protective equipment section.

Notification Procedures:

Stop leak if you can do so without risk. In case of spills, beware of slippery floors and surfaces.

Environmental Precautions:

Prevent runoff from entering drains, sewers, or streams.

7. Handling and storage

Precautions for safe handling:

Sensitivity to static discharge is not expected. Do not get in eyes, on skin, on clothing. Do not taste or swallow. Wear protective gloves/protective clothing/eye protection/face protection. Use only in well-ventilated areas.

Conditions for safe storage, including any incompatibilities:

Keep container tightly closed and in a well-ventilated place. Use original container or packaging of similar material of construction

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

None of the components have assigned exposure limits.

SDS US



Version: 1.5

Revision Date: 08/11/2017

PFC401CLR 5TG

Appropriate Engineering

Controls

Eye wash facilities and emergency shower must be available when

handling this product.

Individual protection measures, such as personal protective equipment

General information:

Ventilation and other forms of engineering controls are preferred for controlling exposures. Respiratory protection may be needed for non-

routine or emergency situations.

Eye/face protection:

Safety glasses with side shields Monogoggles

Skin Protection

Hand Protection:

Neoprene

Other:

Wear suitable protective clothing and eye/face protection.

Respiratory Protection:

If exposure limits are exceeded or respiratory irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Supplied air respirators may be required for non-routine or emergency situations. Respiratory protection must be provided in accordance with OSHA

regulations (see 29CFR 1910.134).

Hygiene measures:

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing to remove contaminants. Discard contaminated

footwear that cannot be cleaned. Use only with adequate ventilation.

9. Physical and chemical properties

Appearance

Physical state:

solid

Form:

solid

Color:

Colorless

Odor:

Ammonia.

Odor threshold:

No data available.

:Ha

No data available.

Melting point/freezing point:

No data available.

Initial boiling point and boiling range:

100.00 °C

Flash Point:

> 93.3 °C (estimated)

Evaporation rate:

No data available.

Flammability (solid, gas):

No data available.

Upper/lower limit on flammability or explosive limits

SDS_US

4/12



#M5

Version: 1.5

Revision Date: 08/11/2017

PFC401CLR 5TG

Flammability limit - upper (%):

Flammability limit - lower (%):

Explosive limit - upper (%):

Explosive limit - lower (%): Heat of combustion:

Vapor pressure:

No data available.

Vapor density:

Density:

Relative density:

Solubility(ies)

Solubility in water:

Solubility (other):

Partition coefficient (n-octanol/water) Log

Pow:

Auto-ignition temperature:

Decomposition temperature:

SADT:

Viscosity, dynamic:

Viscosity, kinematic:

VOC:

No data available.

No data available.

No data available.

No data available. No data available.

ino dala avallable.

No data available.

No data available. No data available.

No data available.

No data available.

No data available.

47.54 g/l;

10. Stability and reactivity

Reactivity:

No dangerous reaction if used as recommended.

Chemical Stability:

Material is stable under normal conditions.

Possibility of hazardous

reactions:

Hazardous polymerisation does not occur.

Conditions to avoid:

No data available.

Incompatible Materials:

None known.

Hazardous Decomposition

Products:

Carbon oxides

11. Toxicological information

Information on likely routes of exposure

Ingestion:

No data available.

SDS_US



Version: 1.5

Revision Date: 08/11/2017

PFC401CLR 5TG

Inhalation:

No data available.

Skin Contact:

No data available.

Eye contact:

No data available.

Symptoms related to the physical, chemical and toxicological characteristics

Ingestion:

No data available.

Inhalation:

No data available.

Skin Contact:

No data available.

Eye contact:

No data available.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral

Product:

Not classified for acute toxicity based on available data.

Dermal

Product:

Not classified for acute toxicity based on available data.

Inhalation

Product:

Not classified for acute toxicity based on available data.

Repeated dose toxicity

Product:

No data available.

Skin Corrosion/Irritation

Product:

No data available.

Serious Eye Damage/Eye Irritation

Product:

No data available.

Respiratory or Skin Sensitization

Product:

No data available.

Carcinogenicity

Product:

No data available.



Version: 1.5

Revision Date: 08/11/2017

PFC401CLR 5TG

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogenic components identified

US. National Toxicology Program (NTP) Report on Carcinogens:

No carcinogenic components identified

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):

No carcinogenic components identified

Germ Cell Mutagenicity

In vitro

Product:

No data available.

In vivo

Product:

No data available.

Reproductive toxicity

Product:

No data available.

Specific Target Organ Toxicity - Single Exposure

Product:

No data available.

Specific Target Organ Toxicity - Repeated Exposure

Product:

No data available.

Aspiration Hazard

Product:

No data available.

Other effects:

None known. None.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product:

No data available.

Aquatic Invertebrates

Product:

No data available.

Chronic hazards to the aquatic environment:

Fish

SDS US



Version: 1.5

Revision Date: 08/11/2017

PFC401CLR 5TG

Product:

No data available.

Aquatic Invertebrates

Product:

No data available.

Toxicity to Aquatic Plants

Product:

No data available.

Persistence and Degradability

Biodegradation

Product:

No data available.

BOD/COD Ratio

Product:

No data available.

Bioaccumulative potential

Bioconcentration Factor (BCF)

Product:

No data available.

Partition Coefficient n-octanol / water (log Kow)

Product:

No data available.

Mobility in soil:

No data available.

Other adverse effects:

No data available.

13. Disposal considerations

General information:

The generation of waste should be avoided or minimized wherever possible. Do not discharge into drains, water courses or onto the ground. See Section 8 for information on appropriate personal protective

equipment.

Disposal instructions:

Disposal should be made in accordance with federal, state and local

regulations.

Contaminated Packaging:

Dispose of as unused product.

14. Transport information

DOT

Not regulated.

IMDG

Not regulated.

SDS_US

8/12



Version: 1.5

Revision Date: 08/11/2017

PFC401CLR 5TG

IATA

Not regulated.

Special precautions for user:

This product is not regarded as dangerous goods according to the

national and international regulations on the transport of

dangerous goods.

15. Regulatory information

US Federal Regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

None present or none present in regulated quantities.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

No SARA Hazards

SARA 302 Extremely Hazardous Substance

None present or none present in regulated quantities.

SARA 304 Emergency Release Notification

None present or none present in regulated quantities.

SARA 311/312 Hazardous Chemical

None present or none present in regulated quantities.

SARA 313 (TRI Reporting)

None present or none present in regulated quantities.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

None present or none present in regulated quantities.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):

None present or none present in regulated quantities.

US State Regulations

US. California Proposition 65

This product contains chemical(s) known to the State of California to cause cancer and/or to cause birth defects or other reproductive harm.



MOMENTIVE

are university prevolutions.

#175

Version: 1.5

Revision Date: 08/11/2017

PFC401CLR 5TG

Formaldehyde

No significant risk level: 40

µg/day. Carcinogenic.

Methanol

Maximum Allowable Dose Level

(MADL): 47000 µg/day. Developmental toxin.

US. New Jersey Worker and Community Right-to-Know Act

Chemical Identity

Styrene-acrylic copolymer

Propanoic acid, 2-methyl-, 1,1'-[2,2-dimethyl-1-(1-methylethyl)-1,3propanediyl] ester, Isopropyl-2,2-dimethyltrimethylene diisobutyrate 1,2-Propanediol

Acrylic Acid

US. Massachusetts RTK - Substance List

Chemical Identity

Formaldehyde

STYRENE

US. Pennsylvania RTK - Hazardous Substances

Chemical Identity

1,2-Propanediol

US. Rhode Island RTK

Chemical Identity

1,2-Propanediol





Version: 1.5

Revision Date: 08/11/2017

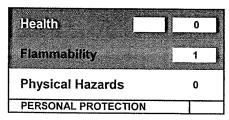
PFC401CLR 5TG

Inventory Status:

Australia AICS:	n (Negative listing)	Remarks: None.
EU EINECS List:	n (Negative listing)	Remarks: None.
Japan (ENCS) List:	n (Negative listing)	Remarks: None.
China Inventory of Existing Chemical Substances:	n (Negative listing)	Remarks: None.
Korea Existing Chemicals Inv. (KECI):	n (Negative listing)	Remarks: None.
Canada DSL Inventory List:	n (Negative listing)	Remarks: None.
Canada NDSL Inventory:	n (Negative listing)	Remarks: None.
New Zealand Inventory of Chemicals:	n (Negative listing)	Remarks: None.
Philippines PICCS:	n (Negative listing)	Remarks: None.
US TSCA Inventory:	y (positive listing)	Remarks: On TSCA Inventory

16.Other information, including date of preparation or last revision

HMIS Hazard ID



Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible; *Chronic health effect

Issue Date:

08/11/2017

Revision Date:

No data available.

Version #:

1.5

Further Information:

No data available.





Version: 1.5

Revision Date: 08/11/2017

PFC401CLR 5TG

Disclaimer:

Notice to reader

Unless otherwise specified in section 1, Momentive products are intended for use in the manufacture and/or formulation of products and are not intended for direct consumer use. These products are not intended for long-lasting (> 30 days) implantation, injection or direct ingestion into the human body, nor for use in the manufacture of multiple use contraceptives. Keep out of the reach of children.

Further Information

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.

®,*, and TM indicate trademarks owned by or licensed to Momentive.

PIPE THREAD SEAL TAPE; Slic-tite® PTFE PIPE THREAD TAPE; **CORD OF PTFE**

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

according to Canadian Hazardous Products Regulations (HPR) Date of issue: 05/06/2015

LA-CO Industries, Inc.

Version: 1.0

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

1.1. **Product identifier**

Product form

: Article

Trade name

: PIPE THREAD SEAL TAPE: Slic-tite® PTFE PIPE THREAD TAPE: CORD OF PTFE

Synonyms

: PIPE THREAD SEAL TAPE

Slic-tite® PTFE PIPE THREAD TAPE - White, Yellow, Pink

CORD OF PTFE

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

Use of the substance/mixture

: sealant

Details of the supplier of the safety data sheet

LA-CO Industries, Inc. 1201 Pratt Boulevard

Elk Grove Village, IL. 60007-5746

Phone: (847) 956-7600 Fax: (847) 956-9885

E-mail: customer_service@laco.com

1.4. **Emergency telephone number**

Emergency number

: 24-hour emergency: CHEMTREC- U.S.: 1-800-424-9300 International: +1-703-527-3887

SECTION 2: Hazards identification

Classification of the substance or mixture

Classification in accordance with the Globally Harmonized Standard

Not classified

2.2 Label elements

GHS-US labelling

No labelling applicable

Other hazards 2.3.

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

No hazardous components.

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general

: Never give anything by mouth to an unconscious person.

First-aid measures after inhalation

: Not applicable.

First-aid measures after skin contact

: Wash with plenty of soap and water.

First-aid measures after eve contact

: In case of contact, immediately flush eyes with plenty of water.

First-aid measures after ingestion

: Drink plenty of water. Call a POISON CENTER or doctor/physician if you feel unwell.

Most important symptoms and effects, both acute and delayed 4.2.

Symptoms/injuries

: Not expected to present a significant hazard under anticipated conditions of normal use.

06/05/2015 SDS Ref : LACO1505007 EN (English) 1/1

PIPE THREAD SEAL TAPE; Slic-tite® PTFE PIPE THREAD TAPE; CORD OF PTFE

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations according to Canadian Hazardous Products Regulations (HPR)

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

: AFFF. Dry chemical. Carbon dioxide.

Unsuitable extinguishing media

: None known.

5.2. Special hazards arising from the substance or mixture

Fire hazard

: Burning produces irritating, toxic and noxious fumes.

Reactivity

: No dangerous reactions known.

5.3. Advice for firefighters

Firefighting instructions

: Cool adjacent structures and containers with water spray to protect and prevent ignition.

Protection during firefighting

Do not enter fire area without proper protective equipment, including respiratory protection. Use

self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures

: Avoid contact with skin and eyes.

6.1.1. For non-emergency personnel

Emergency procedures

: Evacuate unnecessary personnel.

6.1.2. For emergency responders

Emergency procedures

: Ventilate area.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment

: Sweep or shovel into suitable containers.

Methods for cleaning up

: Recover the product mechanically.

6.4. Reference to other sections

Section 13: disposal information. Section 7: safe handling. Section 8: personal protective equipment.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Hygiene measures

: Handle in accordance with good industrial hygiene and safety procedures.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions

: Do not store near food, foodstuffs, drugs, or potable water supplies.

Storage temperature

: -53.89 - 371.1 °C

Heat and ignition sources

: Keep away from heat, sparks and flame.

Storage area

: Store in dry, cool, well-ventilated area.

7.3. Specific end use(s)

sealant.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

PIPE THREAD SEAL TAPE;	lic-tite® PTFE PIPE THREAD TAPE; CORD OF PTFE
ACGIH	Not applicable
OSHA	Not applicable



PIPE THREAD SEAL TAPE; Slic-tite® PTFE PIPE THREAD TAPE; CORD OF PTFE

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations according to Canadian Hazardous Products Regulations (HPR)

8.2. Exposure controls

Appropriate engineering controls

: Ensure good ventilation of the work station.

Personal protective equipment

: Avoid all unnecessary exposure.

Hand protection

: None under normal use.

Eye protection

: None under normal use.

Respiratory protection

: No special respiratory protection equipment is recommended under normal conditions of use

with adequate ventilation.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state

: Solid

Colour

Variable.

Odour

рΗ

odourless.

Odour threshold

: No data available

Relative evaporation rate (butyl acetate=1)

: No data available

Melting point

No data available

weiting pon

INO data available

Freezing point

No data available

Boiling point

No data available

Flash point

No data available

Auto-ignition temperature
Decomposition temperature

: No data available
: No data available

Flammability (solid, gas)

No data available

Vapour pressure

No data available

Relative vapour density at 20 °C

: No data available

Relative density

No data available

Solubility Log Pow insoluble in water. No data available

Log Kow

: No data available

Viscosity, kinematic

No data available

Viscosity, dynamic

: No data available

Explosive properties

No data availableNo data available

Oxidising properties Explosive limits

: No data available

9.2. Other information

VOC content

: 0 °C

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4.

Conditions to avoid

Heat.

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

Burning produces irritating, toxic and noxious fumes.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

: Not classified

PIPE THREAD SEAL TAPE; Slic-tite® PTFE PIPE THREAD TAPE; CORD OF PTFE

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations according to Canadian Hazardous Products Regulations (HPR)

Skin corrosion/irritation : Not classified
Serious eye damage/irritation : Not classified
Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

Specific target organ toxicity (single : Not classified

exposure)

: Not classified

Specific target organ toxicity (repeated exposure)

: Not classified

exposure

Aspiration hazard

: Not classified

Potential adverse human health effects and symptoms

- -

Likely routes of exposure

: Skin and eye contact

SECTION 12: Ecological information

12.1 Toxicity

No additional information available

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Sewage disposal recommendations

: Do not dispose of waste into sewer.

Waste disposal recommendations

: Dispose in a safe manner in accordance with local/national regulations.

SECTION 14: Transport information

In accordance with DOT and TDG

Not considered a dangerous good for transport regulations

Proper Shipping Name (ADR)

: Not applicable

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

No additional information available

15.2. International regulations

CANADA

No additional information available

EU-Regulations

No additional information available



PIPE THREAD SEAL TAPE; Slic-tite® PTFE PIPE THREAD TAPE; CORD OF PTFE

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations according to Canadian Hazardous Products Regulations (HPR)

National regulations

PIPE THREAD SEAL TAPE; Slic-tite® PTFE PIPE THREAD TAPE; CORD OF PTFE

All components are listed on the EEC inventory European Inventory of Existing Commercial Chemical Substances (EINECS).

All ingredients are listed in the Toxic Substances Control Act (TSCA).

All ingredients are listed on the Canadian Domestic Substances List (DSL) or Non-Domestic Substances List (NDSL).

15.3. US State regulations

Abbreviations and acronyms

No additional information available

SECTION 16: Other information

Indication of changes

: Original Document.

Data sources

: ACGIH (American Conference of Government Industrial Hygienists).

European Chemicals Agency (ECHA) C&L Inventory database. Accessed at http://echa.europa.eu/web/quest/information-on-chemicals/cl-inventory-database.

Krister Forsberg and S.Z. Mansdorf, "Quick Selection Guide to Chemical Protective Clothing",

Fifth Edition.

National Fire Protection Association. Fire Protection Guide to Hazardous Materials; 10th

edition.

OSHA 29CFR 1910.1200 Hazard Communication Standard.

TSCA Chemical Substance Inventory. Accessed at

http://www.epa.gov/oppt/existingchemicals/pubs/tscainventory/howto.html.: ATE: Acute Toxicity Estimate. CAS (Chemical Abstracts Service) number.

CLP: Classification, Labelling, Packaging.

EC50: Environmental Concentration associated with a response by 50% of the test population.

GHS: Globally Harmonized System (of Classification and Labeling of Chemicals).

LD50: Lethal Dose for 50% of the test population.
OSHA: Occupational Safety & Health Administration.

PBT: Persistent, Bioaccumulative, Toxic.

TWA: Time Weight Average.

TSCA: Toxic Substances Control Act.

Other information : None.

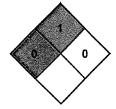
NFPA health hazard : 0 - Exposure under fire conditions would offer no hazard

beyond that of ordinary combustible materials.

NFPA fire hazard : 1 - Must be preheated before ignition can occur.

NFPA reactivity : 0 - Normally stable, even under fire exposure conditions,

and not reactive with water.



SDS Prepared by: The Redstone Group, LLC

6077 Frantz Rd. Suite 206

Dublin, OH USA 43016 T 614-923-7472 www.redstonegrp.com

LACO NA GHS SDS

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product

LA-CO Industries, Inc.

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations according to Canadian Hazardous Products Regulations (HPR)

Date of issue: 09/17/2012Revision date: 10/14/2015

Version: 2.0

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

1.1. Product identifier

Product form

: Mixture

Trade name

: Slic-Tite® Paste with PTFE

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

Use of the substance/mixture

: sealant

1.3. Details of the supplier of the safety data sheet

LA-CO Industries, Inc. 1201 Pratt Boulevard

Elk Grove Village, IL. 60007-5746

Phone: (847) 956-7600 Fax: (847) 956-9885

E-mail: customer_service@laco.com

1.4. Emergency telephone number

Emergency number

: 24-hour emergency: CHEMTREC- U.S. : 1-800-424-9300 International: +1-703-527-3887

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification in accordance with the Globally Harmonized Standard

Not classified

2.2 Label elements

GHS-US labelling

No labelling applicable

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

There are no components required to be shown.

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general ... Never give anything by mouth to an unconscious person. If you feel unwell, seek medical

advice (show the label where possible).

First-aid measures after inhalation : If inhaled and if breathing is difficult, remove victim to fresh air and keep at rest in a position

comfortable for breathing.

First-aid measures after skin contact : Wash with plenty of soap and water.

First-aid measures after eye contact : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing.

First-aid measures after ingestion : Do NOT induce vomiting. Get medical advice/attention if you feel unwell.

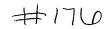
4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries : None known.

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

Treat symptomatically.

14/10/2015 FN (Fnnlish) SDS Ref : LaCO1441000 4/E



Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations according to Canadian Hazardous Products Regulations (HPR)

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

: Dry powder. Carbon dioxide. Foam.

Unsuitable extinguishing media

: Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard

: No particular fire or explosion hazard.

Reactivity

: No dangerous reactions known.

5.3. Advice for firefighters

Firefighting instructions

Exercise caution when fighting any chemical fire. Do not allow run-off from fire fighting to enter

drains or water courses

Protection during firefighting

Do not enter fire area without proper protective equipment, including respiratory protection. Use

self-contained breathing apparatus. Wear fire/flame resistant/retardant clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures

: Avoid contact with skin and eyes.

6.1.1. For non-emergency personnel

Protective equipment

: Wear suitable gloves. Chemical goggles or safety glasses.

Emergency procedures

: Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment

: Wear suitable gloves. Chemical goggles or safety glasses.

Emergency procedures

: Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

For containment

: Absorb and/or contain spill with inert material, then place in suitable container.

Methods for cleaning up

: Take up in non-combustible absorbent material and shove into container for disposal.

6.4. Reference to other sections

Section 13: disposal information. Section 7: safe handling. Section 8: personal protective equipment.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling

: Avoid breathing vapours.

Hygiene measures

: Wash hands and other exposed areas with mild soap and water before eating, drinking or

smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions

: Store in a dry, cool and well-ventilated place.

Incompatible products

: Strong oxidizing agents. Strong acids. Strong bases.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

-	Slic-Tite® Paste with PTFE	
	ACGIH	Not applicable
	OSHA	Not applicable

8.2. Exposure controls

Appropriate engineering controls

: Ensure good ventilation of the work station.

Personal protective equipment : Avoid all

: Avoid all unnecessary exposure.



Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations according to Canadian Hazardous Products Regulations (HPR)

Hand protection : Use rubber gloves

Eye protection : In case of splashing or aerosol production: protective goggles.

Respiratory protection : In case of inadequate ventilation wear respiratory protection. Use an approved respirator

equipped with oil/mist cartridges.

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

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid

Appearance : Paste. Viscous.

Colour : white. Odour : Oily.

Odour threshold : No data available pH : No data available Relative evaporation rate (butyl acetate=1) : No data available Melting point : No data available Freezing point : No data available contains a valiable contains available contains a valiable contains available contains

Boiling point : 177 °C Flash point : 150 °C

Auto-ignition temperature : No data available

Decomposition temperature : > 300 °C

Flammability (solid, gas) : No data available
Vapour pressure : No data available
Relative vapour density at 20 °C : No data available
Relative density : Specific gravity 1.48
Solubility : insoluble in water.

Log Pow : <1

Log Kow : 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 : No data available

9.2. Other information

VOC content : 0 %

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Heat. Open flame.

10.5. Incompatible materials

Strong oxidizing agents. Strong bases. Strong acids.

10.6. Hazardous decomposition products

Burning produces irritating, toxic and noxious fumes. Carbon dioxide. Carbon monoxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Skin corrosion/irritation : Not classified

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations according to Canadian Hazardous Products Regulations (HPR)

Serious eye damage/irritation : Not classified Respiratory or skin sensitisation Not classified Germ cell mutagenicity : Not classified : Not classified. Carcinogenicity Reproductive toxicity Not classified : Not classified

Specific target organ toxicity (single

exposure)

Specific target organ toxicity (repeated

exposure)

: Not classified

: Not classified Aspiration hazard

Potential adverse human health effects and symptoms

: Skin and eye contact Likely routes of exposure

SECTION 12: Ecological information

12.1 Toxicity

No additional information available

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

Slic-Tite® Paste with PTFE	
Log Pow	<1

Mobility in soil

No additional information available

Other adverse effects 12.5.

No additional information available

SECTION 13: Disposal considerations

Waste treatment methods

Sewage disposal recommendations : Do not dispose of waste into sewer.

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

SECTION 14: Transport information

In accordance with DOT and TDG

Not considered a dangerous good for transport regulations

: Not applicable Proper Shipping Name (ADR)

Transport hazard class(es) (ADR)

Transport by sea

Transport hazard class(es) (IMDG)

Air transport

Transport hazard class(es) (IATA)

SECTION 15: Regulatory information

15.1. US Federal regulations

No additional information available

15.2. International regulations

CANADA

No additional information available

EU-Regulations

No additional information available

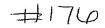
National regulations

Slic-Tite® Paste with PTFE

All components are listed on the EEC inventory European Inventory of Existing Commercial Chemical Substances (EINECS).

All ingredients are listed in the Toxic Substances Control Act (TSCA).

All ingredients are listed on the Canadian Domestic Substances List (DSL) or Non-Domestic Substances List (NDSL).



Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations according to Canadian Hazardous Products Regulations (HPR)

15.3. US State regulations

No additional information available

SECTION 16: Other information

Indication of changes

: GHS classification information.

Data sources

: ACGIH (American Conference of Government Industrial Hygienists).

European Chemicals Agency (ECHA) C&L Inventory database. Accessed at http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database.

Krister Forsberg and S.Z. Mansdorf, "Quick Selection Guide to Chemical Protective Clothing",

Fifth Edition.

National Fire Protection Association. Fire Protection Guide to Hazardous Materials; 10th

edition.

OSHA 29CFR 1910.1200 Hazard Communication Standard.

TSCA Chemical Substance Inventory. Accessed at

http://www.epa.gov/oppt/existingchemicals/pubs/tscainventory/howto.html. : ATE: Acute Toxicity Estimate. CAS (Chemical Abstracts Service) number.

CLP: Classification, Labelling, Packaging.

EC50: Environmental Concentration associated with a response by 50% of the test population.

GHS: Globally Harmonized System (of Classification and Labeling of Chemicals).

LD50: Lethal Dose for 50% of the test population. OSHA: Occupational Safety & Health Administration.

PBT: Persistent, Bioaccumulative, Toxic.

TWA: Time Weight Average.

TSCA: Toxic Substances Control Act.

Other information

Abbreviations and acronyms

: None.

NFPA health hazard : 1 - Exposure could cause irritation but only minor residual

injury even if no treatment is given.

NFPA fire hazard : 1 - Must be preheated before ignition can occur.

0 - Normally stable, even under fire exposure conditions, NFPA reactivity

and not reactive with water.

SDS Prepared by: The Redstone Group, LLC

6077 Frantz Rd. Suite 206

Dublin, OH USA 43016 T 614-923-7472 www.redstonegrp.com

LACO NA GHS SDS

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product





Product Information Sheet

May be used to comply with OSHA's Hazard Communication Standard 29 CFR 1910.1200.

This standard must be consulted for specific requirements.

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name: Lithium-ion Batteries - Rechargeable **Drawing Number:**

58-97-0500

Issue Date:

April 2016

Supersedes Date:

July 2015

Milwaukee Electric Tool Corporation

13135 West Lisbon Road

Brookfield, Wisconsin USA 53005-2550

www.milwaukeetool.com

Company Phone Number:

262-781-3600 or

1-800-729-3878

Emergency Contact Number:

1-800-424-9300

Chemtrec:

United States only

For International: +1-703-741-5970

SECTION 2: HAZARDS IDENTIFICATION

Health	Environmental	Physical
Eye Irritation: No classified hazards	Acute Toxicity: No classified hazards	Flammable liquid: No classified hazards
Skin Irritation: No classified hazards	Chronic Toxicity: No classified hazards	
Acute Toxicity, Oral: No classified hazards		
Acute Toxicity, Inhalation: No classified		
hazards		

GHS Label

No applicable labeling

Hazard Statements	Precautionary Statements
No exposure during routine handling of product	

CLASSIFIED HAZARDS

This material is not hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29CFR 1910.1200. This SDS contains valuable information for the safe handling and proper use of this product. Save this SDS for future reference.

OTHER HAZARDS

Flammable:

Organic components will burn if cell is incinerated. Combustion of cell contents may cause evolution of Hydrogen Fluoride.

Potential Health Effects:

Fluoride interferes with nerve impulse conduction causing severe pain or absence of sensations

WARNING:

No exposure during routine handling of product. Hydrofluoric Acid exposure during firefighting: This information is given for the use of professional fire fighters responding to a warehouse fire where fire from other materials may incinerate batteries. This section is provided solely in case of exposure, during firefighting, to the combustion by-products.

SECTION 3: COMPOSITION /INFORMATION OF INGREDIENTS

Chemical Name	CAS#	Concentration	
Aluminum Foil	7429-90-5	0.1 - 10	
Biphenyl (BP)	92-52-4	0.1 - 0.3	
Copper Foil	7440-50-8	0.1 - 10	
Linear & Cyclic Carbonate solvents	N/A	0 - 17	
Graphite Powder/Carbon	7440-44-0	10 - 30	
Metal Oxide or other Electrolyte (proprietary)	Confidential	10 - 50	
Lithium Hexaflurophosphate (LiPF ₆)	21324-40-3	0 - 5	
Polyvinylidene Flouride (PVDF)	24937-79-9	0.1 - 5	
Styrene Butadiene Rubber (SBR)	N/A	<5	
Aluminum, Steel, Nickel and other inert materials	N/A	Remainder	

SECTION 4: FIRST AID MEASURES

No exposure during routine handling of product. Risk of exposure occurs only if the battery is mechanically or electrically abused.

No effect under routine handling and use to eyes, skin or if inhaled. Ingestion is not likely, given the physical size and state of the cell. If swallowed, seek medical attention immediately.

If exposure to internal materials within cell due to damaged outer casing the following actions are recommended:

EYE CONTACT:

Flush with water for 15 minutes without rubbing and immediately seek medical attention.

SKIN CONTACT:

Wash area immediately with soap and water. If irritation continues see medical attention.

INHALATION:

Leave area immediately and move to fresh air and seek medical attention.

INGESTION:

If swallowed, contact POISON CONTROL CENTER immediately.

SECTION 5: FIRE FIGHTING MEASURES

NFPA 704 Hazard Class



HMIS



0 REACTIVITY

X PERSONAL PROTECTION

- 0 (Minimal)
- 1 (Slight)
- 2 (Moderate)
- 3 (Serious)
- 4 (Severe)

SUITABLE EXTINGUISHING MEDIA:

Water spray, carbon dioxide, dry chemical powder or appropriate foam. Use agent appropriate for surrounding materials.

UNSUITABLE EXTINGUISHING MEDIA:

None.

PRODUCTS OF COMBUSTION:

Organic components will burn if incinerated. Combustion of cell contents may cause evolution of Hydrogen Fluoride. In case of fire in an adjacent area, use water, CO2, or dry chemical extinguishers if cells are packed in their original containers since the fuel of the fire is basically paper products.

PROTECTION OF FIREFIGHTERS:

Hydrofluoric Acid exposure during firefighting: This information is given for the use of professional fire fighters responding to a warehouse fire where fire from other materials may incinerate batteries. This section is provided solely in case of exposure, during firefighting, to the combustion by-products.

SECTION 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS:

Use standard industrial clothing in normal use. If handling large containers of cells wear steel-toed footwear.

ENVIRONMENTAL PRECAUTIONS:

No special precautions necessary.

METHODS FOR CONTAINMENT:

Transport container outdoors. Hold burned cells and fire cleanup solids for disposal as potential hazardous waste. Unburned cells are not hazardous waste. A fire with over 100 kg of cells burnt will likely require reporting to environmental officials. Always consult and obey all international, federal and local environmental laws.

METHODS FOR CLEAN-UP:

No data available

OTHER INFORMATION:

No data available

SECTION 7: HANDLING AND STORAGE

HANDLING:

Use only approved charging equipment. Do not disassemble battery or battery pack. Do not puncture, crush or dispose of in fire.

STORAGE:

Store in a cool, dry place away from sparks and flame. Keep below 125°C. Keep above -60°C. Charge between 0°C and 45°C.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Chemical Name	OSHA PEL	ACGIH TLV	California Prop 65 Reg. Y/N	IARC/NTP Y/N
Aluminum Foil	TWA 5mg/m³*	TWA 5mg/m³*	N	N
Biphenyl (BP)	NA	NA	N	N
Copper Foil	NA	NA	N	N
Linear & Cyclic Carbonate solvents	NA	NA	N	N
Graphite Powder/Carbon	NA	NA	N	N
Metal Oxide or other Electrolyte (proprietary)	NA	NA	N	N
Lithium Hexaflurophosphate (LiPF ₆)	NA	NA	N	N

Polyvinylidene Flouride (PVDF)	NA	NA	N	N
Styrene Butadiene Rubber (SBR)	NA	NA	N	N
Aluminum, Steel, Nickel and other inert materials	NA	NA	N	N

EYE PROTECTION:

Not necessary under conditions of normal use

SKIN PROTECTION:

Not necessary under conditions of normal use

RESPIRATORY PROTECTION:

Not necessary under conditions of normal use

ENGINEERING CONTROLS:

Not necessary under conditions of normal use

GENERAL HYGIENE CONSIDERATIONS:

Not necessary under conditions of normal use

EXPOSURE GUIDELINES:

Not necessary under conditions of normal use

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Data represent typical values and are not intended to be specifications. NA=Not Applicable; ND=Not Determined

Physical state:	Solid	Viscosity:	NA
Colour:	NA	Upper Explosive Limits (vol % in air):	NA
Odor:	Odorless	Lower Explosive Limits (vol % in air):	NA
Odor Threshold:	NA	Vapor pressure:	NA
pH:	NA	Vapor density:	NA
Melting/Freezing Point:	NA	Relative density:	NA
VOC Content:	NA	Solubility:	NA
Boiling Point:	NA	Partition Coefficient:	NA
Flash Point:	NA	Auto-ignition Temperature:	NA
Evaporation Rate:	NA	Decomposition Temperature:	NA
Specific Gravity:	NA	Flammability (solid, gas):burn if cell is incinerated	Organic components will

SECTION 10: STABILITY AND REACTIVITY

INCOMPATIBLE MATERIALS:

Water, heat and strong acids.

DECOMPOSITION PRODUCTS MAY INCLUDE:

Hydrogen Fluoride, Phosphorus Oxides, Carbon Monoxide, Carbon Dioxide, Lithium Hydroxide, Manganese Oxides, Aluminum Oxide, possible fluoro-compounds, Carbon soot.

CONDITIONS TO AVOID:

Do not crush, puncture, incinerate, immerse in water or heat over 212°F (100°C). Steel casing slowly dissolves in strong mineral acids.



POLYMERIZATION:

Hazardous polymerization will not occur. Spontaneous decomposition will not occur at normal temperature.

CHEMICAL STABILITY:

This product is stable.

REACTIVITY:

Hazardous polymerization will not occur. Spontaneous decomposition will not occur at normal temperature.

SECTION 11: TOXICOLOGY INFORMATION

LIKELY ROUTES OF EXPOSURE: Inhalation, Eye and Skin contact

Eye contact, skin contact, skin absorption, inhalation only if burned. Hydrofluoric acid is extremely corrosive. Contact with hydrogen fluoride fumes is to be avoided. Permissible exposure limit is 3ppm. In case of contact with hydrogen fluoride fumes, immediately leave the area and seek first aid <u>and</u> emergency medical attention. Symptoms may have delayed onset. Fluoride ions penetrate skin readily causing destruction of deep tissue layers even bone. Fluoride interferes with nerve impulse conduction causing severe pain or absence of sensations. Immediately flush eyes or skin with water for at least 20 minutes to neutralize the acidity and remove some fluoride. Remove and destroy all contaminated clothing and permeable personal possessions. Before re-use, impermeable possessions should be soaked in benzalkonium chloride after washing. Following flushing of the affected areas, an iced aqueous solution of benzalkonium chloride or 2.5% calcium gluconate gel should be applied to react with the fluoride ion. Compresses and wraps may be used for areas where immersion is not practical. Medicated dressing should be changed every 2 minutes. Exposure to hydrofluoric acid fumes sufficient to cause pain requires immediate hospitalization for monitoring for pulmonary edema.

ACUTE SYMPTOMS AND EFFECTS:

Inhalation:

No further toxicological data known

Eye contact: Skin contact:

No further toxicological data known No further toxicological data known

Ingestion:

No further toxicological data known

OTHER:

No further data known.

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION:

None in routine handling of product.

TOXICITY:

No data available

PERSISTENCE AND DEGRADABILITY (BIOPERSISTENCY & BIODEGRADABILITY):

None in routine handling of product.

POTENTIAL OF BIOACCUMULATION:

None in routine handling of product.

MOBILITY IN SOIL:

None in routine handling of product.

OTHER ADVERSE EFFECTS:

No data available

SECTION 13: DISPOSAL CONSIDERATIONS

DISPOSAL:

Dispose in accordance with appropriate regulations. Always consult and obey all international, federal, provincial/state and local hazardous waste disposal laws. Some jurisdictions require recycling of this spent product. Battery recycling is encouraged. Lithium ion batteries are safe for disposal in the normal municipal waste stream since they are not defined by the federal government as hazardous waste. However, Lithium ion batteries are recyclable.

This product does not contain mercury, cadmium or Lithium (metal).

DO NOT INCINERATE or subject battery cells to temperatures in excess of 212°F (100°C).

SECTION 14: TRANSPORTATION INFORMATION

U.S. DOT HAZARDOUS MATERIAL REGULATIONS (RE: GROUND TRANSPORT)

Proper Shipping Description:

UN3480 Lithium-ion batteries; UN3481 Lithium-ion batteries packed with or contained in equipment; Class 9.

Milwaukee Lithium-ion batteries are to be shipped in compliance with relevant requirements of HMR "49 CFR173.185".

CANADA TRANSPORT DANGEROUS GOODS (RE: GROUND TRANSPORT)

Proper Shipping Description:

UN3480 Lithium-ion batteries; UN3481 Lithium-ion batteries packed with or contained in equipment; Class 9.

Milwaukee Lithium-ion batteries are to be shipped in compliance with relevant requirements of TDG "Part 2" (Section 2.43), or TDG "Schedule 2" (Special Provision 34), as applicable.

INTERNATIONAL DANGEROUS GOODS REGULATIONS (RE: AIR, SEA, GROUND TRANSPORT)

Proper Shipping Description:

UN3480 Lithium-ion batteries; UN3481 Lithium-ion batteries packed with or contained in equipment; Class 9.

Milwaukee Lithium-ion batteries are to be shipped in compliance with relevant requirements of the following DG Regulations:

- ICAO Technical Instructions or IATA Dangerous Goods Regulations (57th Edition): Packing Instructions 965; 966; 967 (Section I, or Section II, as applicable).
- IMDG Code: Packing Instruction P903, or Special Provision 188, as applicable.
- UN Model Regulations on the Transport of Dangerous Goods: Packing Instruction P903, or Special Provision 188, as applicable.
- UN European Agreements (ADR/RID/ADN): Packing Instruction P903, or Special Provision 188, as applicable.
- Australian Dangerous Goods (ADG): Packing Instruction P903, or Special Provision 188, as applicable.

IMPORTANT: The proper classification, packaging, labeling, marking, and documentation requirements for shipping Lithium-ion batteries is dependent upon whether the particular batteries are:

- a.) Rated at 100 Watt-hours (Wh) or less; or
- b.) Rated at greater than 100Wh.

Generally, Lithium-ion batteries rated 100Wh or less are "excepted" from certain Class 9 DG requirements. Always check compliance of Lithium-ion battery consignments against the current regulations governing the chosen mode of transport. When in doubt, contact the carrier or other trained Dangerous Goods professional to confirm acceptability.

UN 38.3 BATTERY TRANSPORTATION TESTING:

Milwaukee rechargeable Lithium-ion batteries listed in Section 1 have passed the relevant transportation test requirements as described in the UN *Manual of Tests and Criteria*, Part III, section 38.3.

UN 38.3 Test Reports are maintained on file at the corporate headquarters of Milwaukee Electric Tool Corporation located at 13135 W. Lisbon Rd., Brookfield, WI, USA 53005.

SECTION 15: REGULATORY INFORMATION

GLOBAL INVENTORIES

TSCA: United StatesSee Sec. 14. Compliant with, relevant transportation test requirements as described in the

UN Manual of Tests & Criteria, Part III, Sub-section 38.3.

DSL: Canada See Sec. 14. Compliant with, relevant transportation test requirements as described in the

UN Manual of Tests & Criteria, Part III, Sub-section 38.3.

ECL: Korea Compliant with, relevant transportation test requirements as described in the UN Manual

of Tests & Criteria, Part III, Sub-section 38.3.

PICCS: Philippines Compliant with, relevant transportation test requirements as described in the UN Manual

of Tests & Criteria, Part III, Sub-section 38.3.

ENCS: Japan Compliant with, relevant transportation test requirements as described in the UN Manual

of Tests & Criteria, Part III, Sub-section 38.3.

AICS: Australia Compliant with, relevant transportation test requirements as described in the UN Manual

of Tests & Criteria, Part III, Sub-section 38.3.

IECS: China Compliant with, relevant transportation test requirements as described in the UN Manual

of Tests & Criteria, Part III, Sub-section 38.3.

EINECS: European Union Compliant with, relevant transportation test requirements as described in the UN Manual

of Tests & Criteria, Part III, Sub-section 38.3.

SARA 313 Information:

SARA Title III Section 313: This product does not contain regulated levels of any toxic chemical subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) and 40 CFR part 372.

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65)

This product does not contain regulated levels of any toxic chemical subject to the reporting requirements of California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65)

WHMIS: Canadian Workplace

This product does not contain regulated levels of any toxic chemical subject to the reporting requirements

SECTION 16: OTHER INFORMATION

ABBREVIATIONS:

TSCA	Toxic	Substance	Contro	Act
------	-------	-----------	--------	-----

ICAOInternational Civil Aviation Organization
IMDGInternational Maritime Dangerous

OSHAOccupational Safety and Health

IARC/NTPInternational Agency for Research on Cancer/National Toxicology Program

SARA.....Superfund Amendments and Reauthorization Act of 1986

ACGIHAmerican Conference of Governmental Industrial Hygienists



Prepared by: Milwaukee Electric Tool Corporation

The batteries referenced herein are considered exempt articles and are not subject to the OSHA Hazard Communication Standard; therefore a SDS is not required. This sheet is being provided as a service to our customers.

The information and recommendations set forth are made in good faith and believed to be accurate as of the date of preparation. *MILWAUKEE ELECTRIC TOOL CORPORATION* makes no warranty, expressed or implied, regarding the accuracy of this data or the results to be obtained from the use thereto.

Safety Data Sheet



* Trusted Quality Since 1921 *
www.rustoleum.com

1. Identification

Product Name:

IC LSPR 12PK MARK CONSTRUCTION

CLEAR

Product Identifier:

331774

Product Use/Class:

Marking Paint/Aerosols

Supplier:

Rust-Oleum Corporation 11 Hawthorn Parkway Vernon Hills, IL 60061

USA

Rust-Oleum Consumer Brands Canada

(RCBC)

200 Confederation Parkway Concord, ON L4K 4T8

Canada

Preparer:

Regulatory Department

Emergency Telephone:

24 Hour Hotline: 847-367-7700

Manufacturer:

Revision Date:

Supercedes Date:

Rust-Oleum Corporation

11 Hawthorn Parkway Vernon Hills, IL 60061

USA

10/12/2017

9/20/2017

2. Hazard Identification

Classification

Symbol(s) of Product



Signal Word Danger

Possible Hazards

20% of the mixture consists of ingredient(s) of unknown acute toxicity.

GHS HAZARD STATEMENTS

Flammable Aerosol, category 1

H222

Extremely flammable aerosol.

Compressed Gas

H280

Contains gas under pressure; may explode if heated.

Carcinogenicity, category 2

H351

Suspected of causing cancer.

STOT, single exposure, category 3, NE

H336

May cause drowsiness or dizziness.

Skin Irritation, category 2

H315

Causes skin irritation.

Page 2 / 7

H318 Causes serious eye damage.

Serious Eye Damage, category 1

GHS LABEL PRECAUTIONARY STATEMENTS

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P210

P211 Do not spray on an open flame or other ignition source.

P251 Do not pierce or burn, even after use.

P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C / 122°F.

P410+P403 Protect from sunlight. Store in a well-ventilated place.

P201 Obtain special instructions before use.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P308+P313 IF exposed or concerned: Get medical advice/attention.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local, regional and national regulations.

P261 Avoid breathing dust/fume/gas/mist/vapors/spray.

P271 Use only outdoors or in a well-ventilated area.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P264 Wash hands thoroughly after handling.

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

P321 For specific treatment see label

P332+P313 If skin irritation occurs: Get medical advice/attention.

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

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing.

P310 If exposed immediately call a POISON CENTER or doctor/physician. Date Printed: 10/12/2017 Page 3 / 7

3. Composition / Information On Ingredients

HAZARDOUS SUBSTANCES Chemical Name CAS-No. Wt.% **GHS Symbols GHS Statements** Acetone 67-64-1 29 **GHS02-GHS07** H225-319-332-336 Propane 74-98-6 14 GHS04 H280 n-Butyl Acetate 123-86-4 GHS02-GHS07 9.5 H226-336 Naphtha, Petroleum, Hydrotreated Light 64742-49-0 8.1 GHS08 H304 Ethylene Glycol Monobutyl Ether 111-76-2 6.9 **GHS07** H302-312-315-319-332 n-Butane 106-97-8 6.4 GHS04 H280 GHS02-GHS05n-Butanol 71-36-3 3.3 H226-302-315-318-332-335-336 GHS07 Xylenes (o-, m-, p- isomers) 1330-20-7 2.2 GHS02-GHS07 H226-315-319-332 GHS02-GHS07-Ethylbenzene 100-41-4 0.5 H225-304-332-351-373 **GHS08**

4. First-Aid Measures

FIRST AID - EYE CONTACT: Immediately flush eyes with plenty of water for at least 15 minutes holding eyelids open. Get medical attention. Do NOT allow rubbing of eyes or keeping eyes closed.

FIRST AID - SKIN CONTACT: Wash skin with soap and water. Remove contaminated clothing. Get medical attention if irritation develops or persists.

FIRST AID - INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention. Do NOT use mouth-to-mouth resuscitation. If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical assistance immediately.

FIRST AID - INGESTION: Aspiration hazard: Do not induce vomiting or give anything by mouth because this material can enter the lungs and cause severe lung damage. Get immediate medical attention. If swallowed, get medical attention.

5. Fire-Fighting Measures

EXTINGUISHING MEDIA:

Alcohol Film Forming Foam, Carbon Dioxide, Dry Chemical, Dry Sand, Water Foo

UNUSUAL FIRE AND EXPLOSION HAZARDS: FLASH POINT IS LESS THAN 20°F. EXTREMELY FLAMMABLE LIQUID AND VAPOR!Water spray may be ineffective. Closed containers may explode when exposed to extreme heat due to buildup of steam. Closed containers may explode when exposed to extreme heat. Vapors may form explosive mixtures with air. Vapors can travel to a source of ignition and flash back. Isolate from heat, electrical equipment, sparks and open flame. Perforation of the pressurized container may cause bursting of the can. No unusual fire or explosion hazards noted. Keep containers tightly closed.

SPECIAL FIREFIGHTING PROCEDURES: Full protective equipment including self-contained breathing apparatus should be used. Evacuate area and fight fire from a safe distance. Water may be used to cool closed containers to prevent pressure buildup and possible autoignition or explosion. Use water spray to keep fire-exposed containers cool. Containers may explode when heated.

Accidental Release Measures

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: Contain spilled liquid with sand or earth. DO NOT use combustible materials such as sawdust. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Remove all sources of ignition, ventilate area and remove with inert absorbent and non-sparking tools. Dispose of according to local, state (provincial) and federal regulations. Do not incinerate closed containers. Ventilate area, isolate spilled material, and remove with inert absorbent. Dispose of contaminated absorbent, container, and unused contents in accordance with local, state, and federal regulations.

7. Handling and Storage

HANDLING: Wash thoroughly after handling. Wash hands before eating. Remove contaminated clothing and launder before reuse. Use only with adequate ventilation. Follow all MSDS/label precautions even after container is emptied because it may retain product residues. Avoid breathing fumes, vapors, or mist. Avoid contact with eyes, skin and clothing.

STORAGE: Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame. Contents under pressure. Do not store above 120 ° F. Store large quantities in buildings designed and protected for storage of flammable aerosols. Product should be stored in tightly sealed containers and protected from heat, moisture, and foreign materials. Store in a dry, well ventilated place. Keep container tightly closed when not in use. Keep away from heat, sparks, flame and sources of ignition. Avoid excess heat.

8. Exposure Controls / Personal Protection

Chemical Name	CAS-No.	Weight % Less Than	ACGIH TLV- TWA	ACGIH TLV- STEL	OSHA PEL-TWA	OSHA PEL- CEILING
Acetone	67-64-1	30.0	250 ppm	500 ppm	1000 ppm	N.E.
Propane	74-98-6	15.0	N.E.	N.E.	1000 ppm	N.E.
n-Butyl Acetate	123-86-4	10.0	50 ppm	150 ppm	150 ppm	N.E.
Naphtha, Petroleum, Hydrotreated Light	64742-49-0	10.0	N.E.	N.E.	N.E.	N.E.
Ethylene Glycol Monobutyl Ether	111-76-2	10.0	20 ppm	N.E.	50 ppm	N.E.
n-Butane	106-97-8	10.0	N.E.	1000 ppm	N.E.	N.E.
n-Butanol	71-36-3	5.0	20 ppm	N.E.	100 ppm	N.E.
Xylenes (o-, m-, p- isomers)	1330-20-7	5.0	100 ppm	150 ppm	100 ppm	N.E.
Ethylbenzene	100-41-4	1.0	20 ppm	N.E.	100 ppm	N.E.

PERSONAL PROTECTION

ENGINEERING CONTROLS: Use explosion-proof ventilation equipment. Provide general dilution of local exhaust ventilation in volume and pattern to keep TLV of hazardous ingredients below acceptable limits. Prevent build-up of vapors by opening all doors and windows to achieve cross-ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

RESPIRATORY PROTECTION: A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use. A NIOSH/MSHA approved air purifying respirator with organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits.

SKIN PROTECTION: Use gloves to prevent prolonged skin contact. Nitrile or Neoprene gloves may afford adequate skin protection.

EYE PROTECTION: Use safety eyewear designed to protect against splash of liquids.

OTHER PROTECTIVE EQUIPMENT: Refer to safety supervisor or industrial hygienist for further guidance regarding types of personal protective equipment and their applications.

HYGIENIC PRACTICES: Wash thoroughly with soap and water before eating, drinking or smoking. Remove contaminated clothing immediately and launder before reuse.

9. Physical and Chemical Properties

Appearance:	Aerosolized Mist	Physical State:	Liquid
Odor:	Solvent Like	Odor Threshold:	N.E.
Relative Density:	0.766	pH:	N.A.
Freeze Point, °C:	N.D.	Viscosity:	N.D.
Solubility in Water:	Negligible	Partition Coefficient, n-octanol/	
Decompostion Temp., °C:	N.D.	water:	N.D.
Boiling Range, °C:	-37 - 537	Explosive Limits, vol%:	0.9 - 13.0
Flammability:	Supports Combustion	Flash Point, °C:	-96
Evaporation Rate:	Faster than Ether	Auto-ignition Temp., °C:	N.D.
Vapor Density:	Heavier than Air	Vapor Pressure:	N.D.

(See "Other information" Section for abbreviation legend)

10. Stability and Reactivity

CONDITIONS TO AVOID: Avoid temperatures above 120°F (49°C). Avoid all possible sources of ignition.

INCOMPATIBILITY: Incompatible with strong oxidizing agents, strong acids and strong alkalies.

HAZARDOUS DECOMPOSITION: By open flame, carbon monoxide and carbon dioxide. When heated to decomposition, it emits acrid smoke and irritating fumes. Contains solvents which may form carbon monoxide, carbon dioxide, and formaldehyde.

HAZARDOUS POLYMERIZATION: Will not occur under normal conditions.

STABILITY: This product is stable under normal storage conditions.

Toxicological Information

EFFECTS OF OVEREXPOSURE - EYE CONTACT: Causes Serious Eye Irritation

EFFECTS OF OVEREXPOSURE - SKIN CONTACT: May cause skin irritation. Allergic reactions are possible.

EFFECTS OF OVEREXPOSURE - INHALATION: High gas, vapor, mist or dust concentrations may be harmful if inhaled. High vapor concentrations are irritating to the eyes, nose, throat and lungs. Harmful if inhaled. Avoid breathing fumes, spray, vapors, or mist. Prolonged or excessive inhalation may cause respiratory tract irritation.

EFFECTS OF OVEREXPOSURE - INGESTION: Harmful if swallowed.

EFFECTS OF OVEREXPOSURE - CHRONIC HAZARDS: Overexposure to xylene in laboratory animals has been associated with liver abnormalities, kidney, lung, spleen, eye and blood damage as well as reproductive disorders. Effects in humans, due to chronic overexposure, have included liver, cardiac abnormalities and nervous system damage. IARC lists Ethylbenzene as a possible human carcinogen (group 2B). May cause central nervous system disorder (e.g., narcosis involving a loss of coordination, weakness, fatigue, mental confusion, and blurred vision) and/or damage. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. High concentrations may lead to central nervous system effects (drowsiness, dizziness, nausea, headaches, paralysis, and blurred vision) and/or damage.

PRIMARY ROUTE(S) OF ENTRY: Eye Contact, Ingestion, Inhalation, Skin Absorption, Skin Contact

ACUTE TOXICITY VALUES

The acute effects of this product have not been tested. Data on individual components are tabulated below:

CAS-No.	Chemical Name	Oral LD50	Dermal LD50	Vapor LC50
67-64-1	Acetone	5800 mg/kg Rat	>15700 mg/kg Rabbit	50.1 mg/L Rat
74 - 98-6	Propane	N.I.	N.I.	658 mg/L Rat
123-86-4	n-Butyl Acetate	10768 mg/kg Rat	>17600 mg/kg Rabbit	> 21 mg/L Rat
64742-49-0	Naphtha, Petroleum, Hydrotreated Light	>5000 mg/kg Rat	>3160 mg/kg Rabbit	>4951 mg/L Rat
111-76-2	Ethylene Glycol Monobutyl Ether	470 mg/kg Rat	1,060 mg/kg Rabbit	11 mg/L
106-97-8	n-Butane	Ň.I.	Ň.I.	658 mg/L Rat
71-36-3	n-Butanol	700 mg/kg Rat	3402 mg/kg Rabbit	N.I.
1330-20-7	Xylenes (o-, m-, p- isomers)	3500 mg/kg Rat	>4350 mg/kg Rabbit	29.08 mg/L Rat
100-41-4	Ethylbenzene	3500 mg/kg Rat	15400 mg/kg Rabbit	17.4 mg/L Rat

N.I. - No Information

12. Ecological Information

ECOLOGICAL INFORMATION: Product is a mixture of listed components,

13. Disposal Information

DISPOSAL INFORMATION: No Information

4 4	T		I £	- 4.5
14.	11ans	port	Inform	auon

	Domestic (USDOT)	International (IMDG)	<u>Air (IATA)</u>	TDG (Canada)
UN Number:	N.A.	1950	1950	N.A.
Proper Shipping Name:	Paint Products in Limited Quantities	Aerosols	Aerosols	Paint Products in Limited Quantities
Hazard Class:	N.A.	2.1	2.1	N.A.
Packing Group:	N.A.	N.A.	N.A.	N.A.
Limited Quantity:	Yes	Yes	Yes	Yes

15. Regulatory Information

U.S. Federal Regulations:

CERCLA - SARA Hazard Category

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

No Information

Sara Section 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

 Chemical Name
 CAS-No.

 Ethylene Glycol Monobutyl Ether
 111-76-2

 n-Butanol
 71-36-3

 Xylenes (o-, m-, p- isomers)
 1330-20-7

 Ethylbenzene
 100-41-4

Toxic Substances Control Act:

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(b) if exported from the United States:

No TSCA 12(b) components exist in this product.

16. Other Information

HMIS RATINGS

Health: 2* Flam

Flammability: 4

Physical Hazard:

Personal Protection:

Х

NFPA RATINGS

Health: 2

Flammability:

4

Instability

0

0

VOLATILE ORGANIC COMPOUNDS, g/L:

551

SDS REVISION DATE:

10/12/2017

REASON FOR REVISION:

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

The manufacturer believes, to the best of its knowledge, information and belief, the information contained herein to be accurate and reliable as of the date of this safety data sheet. However, because the conditions of handling, use, and storage of these materials are beyond our control, we assume no responsibility or liability for personal injury or property damage incurred by the use of these materials. The manufacturer makes no warranty, expressed or implied, regarding the accuracy or reliability of the data or results obtained from their use. All materials may present unknown hazards and should be used with caution. The information and recommendations in this material safety data sheet are offered for the users' consideration and examination. It is the responsibility of the user to determine the final suitability of this information and to comply with all applicable international, federal, state, and local laws and regulations.



SAFETY DATA SHEET

#179

Date Prepared: 04/29/2015

SDS No:

RMR-141 RTU

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: RMR-141 RTU

GENERAL USE: Ready to Use Disinfectant Cleaner **PRODUCT DESCRIPTION:** Disinfectant & Cleaner

PRODUCT CODE:

CHEMICAL FAMILY: Quaternary ammonium chloride

blend

DISTRIBUTOR

RMR Solutions, LLC

201 Appian Way Dr, Suite 202

Brighton MI, 48116-2478

Emergency Phone: 866-822-8744 Customer Service: 866-822-8744 E-Mail: info@rmrsolutions.com

EPA REG. NO.: 61178-2

24 HR. EMERGENCY TELEPHONE NUMBERS

CHEM-TREC (Medical and Transportation): 800-424-9300

V

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS

Health:

Skin Irritation, Category 3 Eye Irritation, Category 2B

GHS LABEL

SIGNAL WORD: WARNING

HAZARD STATEMENTS

H320: Causes eye irritation.

H316: Causes mild skin irritation.

H303: May be harmful if swallowed.

PRECAUTIONARY STATEMENT(S)

Prevention:

P264: Wash hands thoroughly after handling.

P234: Keep only in original packaging.

P102: Keep out of reach of children.

Response:

P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P310: Immediately call a POISON CENTER or doctor/physician.

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

SOLITION

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

P332+P313: If skin irritation occurs: Get medical advice/attention.

P362: Take off contaminated clothing.

Storage:

P405: Store locked up.

Disposal:

P501: Dispose of contents/container according to all local, state and Federal regulations.

EMERGENCY OVERVIEW

PHYSICAL APPEARANCE: Clear Liquid IMMEDIATE CONCERNS: Mild eye irritant.

POTENTIAL HEALTH EFFECTS

EYES: Contact may cause mild eye irritation.

SKIN: May be mildly irritating with prolonged or repeated contact. **SKIN ABSORPTION:** No known significant effects or critical hazards.

INGESTION: Although of moderate to low toxicity, ingestion of large amounts can cause gastrointestinal irritation, nausea,

vomiting, diarrhea.

REPRODUCTIVE TOXICITY

REPRODUCTIVE EFFECTS: No known significant effects or critical hazards. **TERATOGENIC EFFECTS:** No known significant effects or critical hazards.

CARCINOGENICITY: No known significant effects or critical hazards.

MUTAGENICITY: No known significant effects or critical hazards.

ROUTES OF ENTRY: Eye, skin, ingestion.

CANCER STATEMENT: None

WARNING CAUTION LABELS: Irritant PHYSICAL HAZARDS: None Expected.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS
n-Alkyl dimethyl benzyl ammonium chloride (C12-C18)	0.07	68391-01-5
N-alkyl Dimethyl Ethyl Benzyl Ammonium Chloride (C12-C14)	0.07	68956-79-6
Water	95 - 99	7732-18

4. FIRST AID MEASURES

EYES: Immediately flush eyes with water for at least 15 minutes, while holding eyelids open. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Seek medical attention immediately.

SKIN: Remove contaminated clothing. Immediately flush with water followed by washing with mild soap. Seek medical attention.

INGESTION: Get immediate medical attention. Do not induce vomiting unless instructed to do so by poison center or physician.

INHALATION: Remove victim to restrain and monitor. Seek medical advise if irritation persists.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

EYES: Slight discomfort with redness, watering eyes.

SKIN: Prolonged contact may cause irritation marked by redness, slight burning sensation.

SKIN ABSORPTION: None Expected. **INGESTION:** Stomach upset, vomiting.

INHALATION: Irritation of nose, throat and lungs with coughing, sneezing, possible difficulty breathing.

ACUTE TOXICITY: Irritating to eyes, mild skin irritation.

5. FIRE FIGHTING MEASURES

FLAMMABLE CLASS: None

EXTINGUISHING MEDIA: Not required.

EXPLOSION HAZARDS: None

FIRE FIGHTING PROCEDURES: No special requirements.

HAZARDOUS DECOMPOSITION PRODUCTS: Decomposition products may include: Carbon dioxide, Carbon monoxide, nitrogen

oxides.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Avoid runoff into storm sewers and ditches which lead to waterways.

LARGE SPILL: Avoid walking in material. Prevent product from entering into stream, soil, storm sewer or other bodies of water.

ENVIRONMENTAL PRECAUTIONS

WATER SPILL: Avoid discharges into open waterways.

LAND SPILL: Avoid discharge to soil.

AIR SPILL: NA = Not Applicable

GENERAL PROCEDURES: Isolate spill or leak area immediately. Keep unauthorized personnel away. Do not touch or walk through spilled material. Prevent entry into waterways, sewers, or confined areas. Absorb with dry earth, sand or other non-combustible material and transfer to containers.

RELEASE NOTES: Product may be harmful to aquatic life.

SPECIAL PROTECTIVE EQUIPMENT: No special requirements.

7. HANDLING AND STORAGE

GENERAL PROCEDURES: Do not contaminate water, food, or feed by storage or disposal

HANDLING: Avoid contact with skin and eyes. Wash hands before eating, drinking, smoking or using toilet facilities.

STORAGE: Store only in original container. Do not reuse empty container. If a leaky container must be contained within another, mark the outer container to identify the contents. Store pesticides away from food, pet food, feed, and water sources. Keep this product under locked storage sufficient to make it inaccessible to children or persons unfamiliar with its proper use.

STORAGE TEMPERATURE: Store at ambient temperatures.

STORAGE PRESSURE: Store at ambient atmospheric pressure.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Safety glasses with side shields.

SKIN: Rubber or other chemical resistant gloves

RESPIRATORY: Where danger of mist contact may occur, wear NIOSH approved respiratory protection for mists.

PROTECTIVE CLOTHING: No special requirements.

WORK HYGIENIC PRACTICES: Wash with soap and water after handling. Do not eat, drink or smoke while using product.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid

ODOR: Characteristic.

ODOR THRESHOLD: Not Established

COLOR: Water Clear

pH: 10.0 to 11.0

PERCENT VOLATILE: >98

FLASH POINT AND METHOD: None

FLAMMABLE LIMITS: N/A

AUTOIGNITION TEMPERATURE: NA = Not Applicable

VAPOR PRESSURE: 20 mm Hg at 20°C (68°F)

VAPOR DENSITY: ~ 1 Air = 1

BOILING POINT: 212° F; 100° C

"REEZING POINT: 32° F: 0° C

. HERMAL DECOMPOSITION: Not Available

SOLUBILITY IN WATER: Complete

EVAPORATION RATE: (Water =1) 1.0

DENSITY: 8.33 at 20°C (68°F)

SPECIFIC GRAVITY: 1 grams/ml. at 20°C (68°F)

VISCOSITY: Water thin.

(VOC): None

10. STABILITY AND REACTIVITY

REACTIVITY: Stable

HAZARDOUS POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: None Expected.

HAZARDOUS DECOMPOSITION PRODUCTS: None Expected.

INCOMPATIBLE MATERIALS: Strong oxidizers

11. TOXICOLOGICAL INFORMATION

ACUTE

	TA .		
Chemical Name		ORAL LD ₅₀ (rat)	DERMAL LD ₅₀ (rabbit)
n-Alkyl dimethyl benzyl ammonium chloride (C12-C18)		> 1890 mg/kg (rat)	> 2000 mg/kg (rabbit)
N-alkyl Dimethyl Ethyl Benzyl Ammonium Chloride (C12-C14)		> 500 mg/kg (rat)	> 2000 mg/kg (rabbit)

DERMAL LD₅₀: > 2000 mg/kg male and female rabbits.

ORAL LD₅₀: > 5000 mg/kg Male and Female rats.

EYE EFFECTS: Mild to moderate eye irritant.

SKIN EFFECTS: May irritate skin with prolonged or repeated contact.

CARCINOGENICITY

IARC: No listed substance

CORROSIVITY: NA = Not Applicable

NEUROTOXICITY: No known significant effects or critical hazards. **GENETIC EFFECTS:** No known significant effects or critical hazards.

REPRODUCTIVE EFFECTS: No known significant effects or critical hazards.

TARGET ORGANS: No known significant effects or critical hazards.

MUTAGENICITY: No known significant effects or critical hazards.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: Not Established

ECOTOXICOLOGICAL INFORMATION: This material may be toxic to aquatic life.

AQUATIC TOXICITY (ACUTE): Not Established

CHEMICAL FATE INFORMATION: This product is biodegradable.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Attempt to use product completely in accordance with intended use. Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at your local office, or the nearest EPA regional office for guidance.

FOR LARGE SPILLS: Consult with local and state authorities for large volume disposal.

PRODUCT DISPOSAL: Small quantities (less than 1 gallon) of used material may be flushed to sanitary sewer with copious amounts of water. Larger quantities must be disposed of by a licensed disposal company.

EMPTY CONTAINER: Triple rinse container promptly after emptying. Fill container 1/4 full with water and recap. Shake for 10 seconds. Drain and repeat. Offer for recycling if available or puncture and dispose in a sanitary landfill, or by other procedures approved by state and local authorities.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Not regulated.

PLACARDS: None LABEL: None

U.S. CUSTOMS HARMONIZATION NUMBER: 3808.94.0000

AIR (ICAO/IATA)

SHIPPING NAME: Not regulated.

VESSEL (IMO/IMDG)

SHIPPING NAME: Not regulated.

15. REGULATORY INFORMATION

UNITED STATES

DOT LABEL SYMBOL AND HAZARD CLASSIFICATION

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HAZARD CATEGORIES: Health - Acute

FIRE: No PRESSURE GENERATING: No REACTIVITY: No ACUTE: Yes CHRONIC: No

313 REPORTABLE INGREDIENTS: No listed substance

302/304 EMERGENCY PLANNING

EMERGENCY PLAN: No listed substance

TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA REGULATORY: All ingredients are listed on the TSCA Chemical Inventory.

CALIFORNIA PROPOSITION 65: No listed substance

CARCINOGEN: No listed substance

FIFRA (FEDERAL INSECTICIDE, FUNGICIDE, AND RODENTICIDE ACT): Regulated

16. OTHER INFORMATION

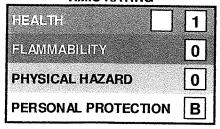
APPROVED BY:

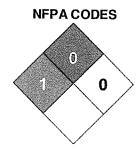
TITLE:

PREPARED BY: Regulatory Affairs Department

Date Prepared:

HMIS RATING





MANUFACTURER DISCLAIMER: This company cannot anticipate all conditions of handling and use of this product. Therefore, this company accepts no responsibility for results obtained by the application of this information, or the safety and suitability of the product either alone or in combination with other products. It is the responsibility of the employer and/or user to provide a safe workplace, using health and safety information contained herein as a guide. This company will accept no liability for damages or losses incurred from the improper handling and use of this product.

