

4.1 First Aid:

# **SAFETY DATA SHEET**

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Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS, 2001/58 & 1272/2008/EC Standards

Ingestion:

SDS Revision: 3.0

SDS Revision Date: 2/2/2015

1.1	Product Name:	DEOXIT® BRAND SOLDERING FLUX, (P/N RSF-R80)
1.2	Chemical Name:	NA
1.3	Synonyms:	DeoxIT® Brand Soldering Flux; PN RSF-R80
1.4	Trade Names:	DeoxIT® Brand RSF-R80 FLUX, syringe, 8 grams, (Part No. RSF-R80-8G); RSF-R80 FLUX, jar, 56 grams (Part No. RSF-R80-2); RSF-R80 FLUX, jar, 226 grams (Part No. RSF-R80-8)
1.5	Product Uses & Restrictions:	Soldering Flux
1.6	Distributor's Name:	CAIG Laboratories, Inc.
1.7	Distributor's Address:	12200 Thatcher Court, Poway, CA 92064-6876 USA
1.8	Emergency Phone:	CHEMTREC: +1 (703) 527-3887 / +1 (800) 424-9300 (CCN XXXXX)
1.9	Business Phone / Fax:	+1 (800) 224-4123

#### 2. HAZARDS IDENTIFICATION

This product is classified as a HAZARDOUS SUBSTANCE but NOT as DANGEROUS GOODS according to the classification criteria of NOHSC: 1088 (2004) and ADG Code (Australia).

WARNING! MAY CAUSE AN ALLERGIC SKIN REACTION.

Classification: Skin Sens. 1B

Hazard Statements (H): H317 – May cause an allergic skin reaction.

Precautionary Statements (P): P261 – Avoid breathing dust. P264 – Wash thoroughly after handling. P280 – Wear protective gloves. P302+P352 – IF ON SKIN: Wash with plenty of water. P333+P313 – If skin irritation or rash occurs get medical advice/attention. P321 – Specific treatment see this container label. P362+P364 – Take off contaminated clothing and was it before reuse. P337+P313 – If eye irritation persists: Get medical advice/attention. P501 - Dispose of contents/container to licenses treatment, storage and disposal facility (TSDF).



### 3. COMPOSITION & INGREDIENT INFORMATION

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					EXPOSURE LIMITS IN AIR (mg/m³)									
					AC	GIH		NOHSC	;		OSHA			
					pı	pm		ppm			ppm		1	
							ES-	ES-	ES-					
CHEMICAL NAME(S)	CAS No.	RTECS No.	EINECS No.	%	TLV	STEL	TWA	STEL	PEAK	PEL	STEL	IDLH	OTHER	
MANA CLIMA BOSINI	8050-09-7	VL0480000	232-475-7	50-60	NA	NA	NF	NF	NF	NA	NA	NA	SENSITIZER	
WW GUM ROSIN	Skin Sens. 1;	H317												
DIETHYLENE GLYCOL DIBUTYL	112-73-2	KN0350000	204-001-9	15-25	NA	NA	NF	NF	NF	NA	NA	NA		
ETHER														
DVMEDEV DOCINI	65997-05-9	NA	NA	15-25	15	3	15	3	NF	15	NA	NA	RESP FRAC	
DYMEREX ROSIN														
DDODEITA DV INODEDIENTO	NA	NA	NA	0-10	NA	NA	NF	NF	NF	NA	NA	NA		
PROPEITARY INGREDIENTS				-										

## 4. FIRST AID MEASURES

If ingested, do not induce vomiting. If product has been swallowed, drink plenty of water or milk

			IMMEDIATELY. If the patient is vomiting, continue to offer water or milk. Never give water or milk to an unconscious person. Contact the nearest Poison Control Center or local emergency number. Provide an estimate of the time at which the material was ingested and the amount of the substance that was swallowed.
		Eyes:	Splashes are not likely; however, if product gets in the eyes, flush with copious amounts of lukewarm water for at least 15 minutes lifting upper and lower lids, occasionally.
		Skin:	Wash thoroughly with soap and water. In case of contact, immediately flush skin with plenty of water for at least 15 minutes.
		Inhalation:	Remove victim to fresh air at once. If breathing difficult, administer oxygen. If breathing stops give artificial respiration. Keep person warm, quiet and get medical attention.
4.2	Effects of Exposure:	Ingestion:	If product is swallowed, may cause nausea, vomiting and/or diarrhea.
		Eyes:	Moderately irritating to the eyes. Symptoms of overexposure may include redness, itching, irritation and watering.
		Skin:	May be irritating to skin. The product can cause allergic skin reactions (e.g., rashes, welts, dermatitis) in some sensitive individuals.
		Inhalation:	None expected.



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			4. FIRS	T All	D ME	<b>ASUR</b>	<u>ES – c</u>	ont'd					
4.3	Symptoms of Overexposure:	Ingestion:	Nausea, intesti										
		<ul> <li>Eyes: Overexposure in eyes may cause redness, itching and watering.</li> <li>Skin: Symptoms of skin overexposure may include redness, itching, and irritation of affected areas.</li> </ul>											
		Skin:	Symptoms of s	kin ove	erexposi	ure may ii	nclude red	ness, itchir	ng, and	irritation	of affe	ected areas.	Frostbite
			like symptoms. individuals.	me	product	can caus	e allergic	skin reacti	ons (e.	g., rasne	es, weit	s, dermanns	) in some
4.4	Acute Health Effects:	Non-irritating	when used as	directe	ed. Mo	derate irr	tation to	eves and s	skin nea	ar affect	ted area	as. Addition	nally, high
			ns of vapors can										<i>,</i> , ,
4.5	Chronic Health Effects:		when used as									e sensitive ir	ndividuals.
1.6	Torget Organo:		luce skin sensitiz	ation ar	nd respi	ratory hyp	ersensitivit	y. Possible	e allergi	c derma	titis.		
4.6	Target Organs:  Medical Conditions	Eyes, Skin.	dermatitis, other	· okip .	anditio	no and d	icardara a	f tha UE	AI TU				1
4.7	Aggravated by Exposure:		s (eves, skin, and				isorders o			DIL ITY			
		targot organi	o (0) 00, 01111, arre	гоорис	atory cy	otom).			AMMA		4 D D C		1
										L HAZ		ENIT	0
								-		LIVE E			G
								EY	ES	SKIN	L	UNGS	
			5 FIE	PEFI	2HTI	NG ME	ASUR	FS					
5.1	Fire & Explosion Hazards:	This product	is not flammable						nov de	nomnac	0 0 t him!	<u>. I</u>	
0.1	a Explosion Hazards.		s to form toxic ga				ı a ıııe, thi	s product t	nay dec	ompose	at nigr	'	
5.2	Extinguishing Methods:		n, CO <sub>2</sub> , Dry Chem									┪ 4	
5.3	Firefighting Procedures:		for surrounding					IA/NIOSH	approve	ed self-c	ontained	<u> </u>	
			paratus (pressur										
			is out. Use wat										
			Avoid spraying										
		Prevent rund	off from fire contr waterway. Firefi	ol or d	ilution f	rom enter	ng sewers	i, drains, d	rinking	water su	upply, o	r	
			f-contained breat										
			on products and				r agamor <sub>l</sub>	octorniai ric	aza. aca	0 0011101	2011011 0	'	
		•	•									•	
			6. ACCIDE	ENT A	AL RE	LEAS	E MEA	SURES	3				
6.1	Spills:		ning any spill o										
			Plastic or rubbe										
			: Wear appropria										
			ch as vermiculite material such as										
			ms, shovels, dust										iaio (c.g.,
			: Keep incompat										from spill
		or release.	Isolate immediate	hazar	d area a	and keep u	ınauthorize	ed personn	el out of	area. S	Stop spi	ll or release i	if it can be
		done with m	inimal risk. Wea	r appro	priate p	rotective e	quipment i	ncluding re	spirato	y protec	tion as	conditions w	arrant.
		7	. HANDLIN	IC 0	ST0	DACE	INFOR		\NI				
7.1	Mark 9 Husiana Drastiana	1											
7.1	Work & Hygiene Practices:		drink or smoke When used as										
										cssary.	OSE CI	iennicai gogi	jies ii eye
7.2	Storage & Handling:	contact is possible. Wash unintentional residues with soap and warm water.  Use and store in a cool, dry, well-ventilated location (e.g., local exhaust ventilation, fans) away from heat and direct											
		sunlight. Av	oid temperatures	above	120 °F.	Keep aw	ay from ind	compatible	substar				
			avoid unintentio						Э.				
7.3	Special Precautions:	Clean all spi	lls promptly. Spil	led mat	terial ma	ay present	a slipping	hazard.					
		0 EVD	SCURE CO	NITD	$\sim$	o DED	CONA	I DDO:	FECT	ION			
0.4	Exposure Limits:	O. EAP	DSURE CO		GIH	& PER	NOHSC	L PRU	IEGI	OSHA		OTHER	
8.1	ppm (mg/m³)	CHEMICAL NAM	ME(S)	TLV	STEL	ES-TWA	ES-STEL	ES-PEAK	PEL	STEL	IDLH	OTHER	
		WW GUM RC	. ,	NA	NA	NF	NF	NF	NA	NA	NA	SENSITIZEI	R
		DYMEREX R		15	3	15	3	NF	15	NA	NA	RESP FRAC	
8.2	Ventilation & Engineering	General me	chanical (e.g., fa									Use local of	r general
	Controls:	exhaust ven	tilation to effecti	veľy rei	move a	nd prever	t buildup	of vapors	or mist	genera	ted from		
		•	sure appropriate						-				n).
8.3	Respiratory Protection:		espiratory protect										
			nere dusts of this										
			uthorized by 29 and Z94.4-93 and										
		Australia.	iiu ∠34.4-33 a∏u	арріісс	1010 91d	iluaius Ul	Janaulan	i iovilices,	LOTHE	mbei 3	ιαι <del>υ</del> δ, 0	'	
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Пере	iled to OSITA, ACC, ANSI, IN	OTISC, WTIWIIS, 2001/30 & 121/2/2000/LC Statitudius   3D3 Nevisioti. 3.0   3D5 Nevisioti Date. 2/2/2013					
	8. 1	EXPOSURE CONTROLS & PERSONAL PROTECTION – cont'd					
8.4	Eye Protection:	Avoid eye contact. Wear splash proof goggles or equivalent eye protection (ANSI Z87). Safety glasses need to be used when handling or using this product.					
8.5	Hand Protection:	Impermeable gloves required. May cause skin irritation in some sensitive individuals. When handling wear rubber, nitrile or impervious plastic gloves.					
8.6	Body Protection:	No apron required when handling small quantities. When handling large quantities (e.g., ≥ 5 lbs), eye wash stations and deluge showers should be available. Upon completion of work activities involving large quantities of this product, wash any exposed areas thoroughly with soap and water.					
		9. PHYSICAL & CHEMICAL PROPERTIES					
9.1	Appearance:	Amber liquid					
9.2	Odor:	Citrus odor					
9.3	Odor Threshold:	NA					
9.4	pH:	NA NA					
9.5	Melting Point/Freezing Point:	NA NA					
9.6	Initial Boiling Point/Boiling Range:	NA NA					
9.7	Flashpoint:	>93.3 °C (200 °F)					
9.8	Upper/Lower Flammability	NA (					
9.9	Limits: Vapor Pressure:	0.01 mm Hg @ 20 °C					
9.10	Vapor Density:	NA					
9.11	Relative Density:	0.913					
9.12	Solubility:	Negligible Negligible					
9.13	Partition Coefficient (log Pow):	NA NA					
9.14	Autoignition Temperature:	NA NA					
9.15	Decomposition Temperature:	NA NA					
9.16	Viscosity:	NA NA					
9.17	Other Information:	NVC 60-70%					
		10. STABILITY & REACTIVITY					
10.1	Stability:	Stable under normal conditions; unstable with heat or contamination.					
10.2	Hazardous Decomposition	Oxides of carbon (CO, CO <sub>2</sub> ).					
40.0	Products:	` ' '					
10.3	Hazardous Polymerization: Conditions to Avoid:	Will not occur.					
10.4	Incompatible Substances:	Open flames, sparks, high heat, incompatible substances and direct sunlight.  Avoid extreme heat and ignition sources. Store away from oxidizers.					
10.5	meompatible oubstances.	Avoid extreme near and ignition sources. Store away from oxidizers.					
		11. TOXICOLOGICAL INFORMATION					
11.1	Routes of Entry:						
11.2	Toxicity Data:	120					
11.4	. Onlony Data.	This product has NOT been tested on animals to obtain toxicology data. Toxicology data, found in scientific literature, is available for some of the components of the product.					
11.3	Acute Toxicity:	Moderate irritation to eyes and skin near affected areas.					
11.4	Chronic Toxicity:	This material may aggravate any pre-existing skin condition (e.g., dermatitis).					
11.5	Suspected Carcinogen:	No.					
11.6	Reproductive Toxicity:	This product is not reported to produce reproductive toxicity in humans.					
	Mutagenicity:	This product is not reported to produce mutagenic effects in humans.					
	Embryotoxicity:	This product is not reported to produce embryotoxic effects in humans.					
	Teratogenicity:	This product is not reported to cause teratogenic effects in humans.					
	Reproductive Toxicity:	This product is not reported to cause reproductive effects in humans.					
11.7	Irritancy of Product:	The product can cause allergic skin reactions (e.g., rashes, welts, dermatitis) upon prolonged or repeated exposure.					
11.8	Biological Exposure Indices:	NE					
11.9	Physician Recommendations:	Treat symptomatically.					
		12. ECOLOGICAL INFORMATION					
12.1	Environmental Stability:						
12.1	Environmental Stability: Effects on Plants & Animals:	There is no specific data available for this product.  There are no specific data available for this product.					



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Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS, 2001/58 & 1272/2008/EC Standards SDS Revision Date: 2/2/2015 13. DISPOSAL CONSIDERATIONS 13.1 Waste Disposal: Products covered by this MSDS, in their original form, when disposed as waste, are considered non hazardous waste according to Federal RCRA regulations (40 CFR 261). Disposal should be in accordance with local, state and federal regulations. Dispose of in accordance with federal, state and local regulations. 13.2 Special Considerations: The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state, federal and provincial regulations. 14. TRANSPORTATION INFORMATION The basic description (ID Number, proper shipping name, hazard class & division, packing group) is shown for each mode of transportation. Additional descriptive information may be required by 49 CFR, IATA/ICAO, IMDG and the CTDGR. 49 CFR (GND): NOT REGULATED IATA (AIR): 14.2 NOT REGULATED IMDG (OCN): 14.3 NOT REGULATED TDGR (Canadian GND): 14 4 NOT REGULATED ADR/RID (EU): 14.5 NOT REGULATED SCT (MEXICO): 14 6 NOT REGULATED ADGR (AUS): 14.7 **NOT REGULATED** 15. REGULATORY INFORMATION SARA Reporting This product does not contain any substances subject to SARA Title III, section 313 reporting requirements. Requirements 15.2 SARA Threshold Planning There are no specific Threshold Planning Quantities for the components of this product. Quantity: 15.3 TSCA Inventory Status: The components of this product are listed on the TSCA Inventory. 15.4 CERCLA Reportable Quantity Ethylene Oxide: 4.5 kg (10 lbs.) (RQ): 15.5 Other Federal Requirements: NA 15.6 Other Canadian Regulations: This product has been classified according to the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by the CPR. components of this product are listed on the DSL/NDSL. None of the components of this product are listed on the Priorities Substances List. 15.7 State Regulatory Information: No other ingredients in this product, present in a concentration of 1.0% or greater, are listed on any of the following state criteria lists: California Proposition 65 (CA65), Delaware Air Quality Management List (DE), Florida Toxic Substances List (FL), Massachusetts Hazardous Substances List (MA), Michigan Critical Substances List (MI), Minnesota Hazardous Substances List (MN), New Jersey Right-to-Know List (NJ), New York Hazardous Substances List (NY), Pennsylvania Right-to-Know List (PA), Washington Permissible Exposures List (WA), Wisconsin Hazardous Substances 15.8 Other Requirements: The primary components of this product are listed in Annex I of EU Directive 67/548/EEC: Irritant (Xi). Risk Phrases (R): 37/38-65 - Respiratory system and skin. Harmful - may cause lung damage if swallowed. Safety Phrases (S): S(2)- 23-24-62 - Keep out of the reach of children. Do not breathe fumes/mists/vapors/spray. Avoid contact with skin. If swallowed, do not induce vomiting: seek

medical advice immediately and show this container or label where possible.



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SDS Revision: 3.0 Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS, 2001/58 & 1272/2008/EC Standards SDS Revision Date: 2/2/2015 16. OTHER INFORMATION WARNING! MAY CAUSE AN ALLERGIC SKIN REACTION. Use only as directed. Keep out of reach of children. 16.1 Other Information: Avoid contact with skin. Wear suitable protective clothing. In case of accident or if you feel unwell seek medical advice immediately (show the label where possible). If skin irritation occurs: get medical advice/attention. KEEP LOCKED UP AND OUT OF REACH OF CHILDREN. 16.2 Terms & Definitions: See last page of this Safety Data Sheet. 16.3 Disclaimer: This Safety Data Sheet is offered pursuant to OSHA's Hazard Communication Standard, 29 CFR §1910.1200. Other government regulations must be reviewed for applicability to this product. To the best of ShipMate's & CAIG Laboratories, Inc.'s knowledge, the information contained herein is reliable and accurate as of this date; however, accuracy, suitability or completeness is not guaranteed and no warranties of any type, either expressed or implied, are provided. The information contained herein relates only to the specific product(s). If this product(s) is combined with other materials, all component properties must be considered. Data may be changed from time to time. Be sure to consult the latest edition. 16.4 Prepared for: CAIG Laboratories, Inc. 12200 Thatcher Court Poway, CA 92064-6876 Tel: +1 (800) CAIG-123 (244-4123) Fax: +1 (858) 486-8398 fax http://www.caig.com/ Prepared by: ShipMate, Inc. P.O. Box 787

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### **DEFINITION OF TERMS**

A large number of abbreviations and acronyms appear on a SDS. Some of these that are commonly used include the following:

#### **GENERAL INFORMATION:**

CAS No.	Chemical Abstract Service Number			
EXPOSURE	EXPOSURE LIMITS IN AIR:			
ACGIH	American Conference on Governmental Industrial Hygienists			
С	Ceiling Limit			
ES	Exposure Standard (Australia)			
IDLH	Immediately Dangerous to Life and Health			
OSHA	U.S. Occupational Safety and Health Administration			
PEL	Permissible Exposure Limit			
STEL	Short-Term Exposure Limit			
TLV	Threshold Limit Value			
TWA	Time Weighted Average			

#### FIRST AID MEASURES:

CPR	Cardiopulmonary resuscitation - method in which a person whose heart has
	stopped receives manual chest compressions and breathing to circulate blood
	and provide oxygen to the hody

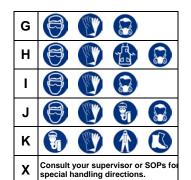
#### HMIS-III HEALTH, FLAMMABILITY & REACTIVITY RATINGS:

0	Minimal Hazard
1	Slight Hazard
2	Moderate Hazard
3	Severe Hazard
4	Extreme Hazard



#### PERSONAL PROTECTION RATINGS:

Α			
В			
С		THE STATE OF THE S	
D		THE STATE OF THE S	
E			
F			





Splash Goggles















Full Face Respirator





Airline Hood/Mask or SCBA

#### OTHER STANDARD ABBREVIATIONS:

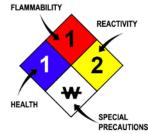
ML	Maximum Limit
mg/m3	milligrams per cubic meter
NA	Not Available
ND	Not Determined
NE	Not Established
NF	Not Found
NR	No Results
ppm	parts per million
SCBA	Self-Contained Breathing Apparatus

#### NATIONAL FIRE PROTECTION ASSOCIATION: NFPA

FLAMMABILITY LIMITS IN AIR:					
Autoignition	Minimum temperature required to initiate combustion in air with no other				
Temperature	source of ignition				
LEL	Lower Explosive Limit - lowest percent of vapor in air, by volume, that will				
	explode or ignite in the presence of an ignition source				
UEL	Upper Explosive Limit - highest percent of vapor in air, by volume, that will				
	explode or ignite in the presence of an ignition source				

#### **HAZARD RATINGS:**

0	Minimal Hazard
1	Slight Hazard
2	Moderate Hazard
3	Severe Hazard
4	Extreme Hazard
ACD	Acidic
ALK	Alkaline
COR	Corrosive
₩	Use No Water
OX	Oxidizer
TREFOIL	Radioactive
	<u> </u>



#### TOXICOLOGICAL INFORMATION:

LD <sub>50</sub>	Lethal Dose (solids & liquids) which kills 50% of the exposed animals				
LC <sub>50</sub>	Lethal concentration (gases) which kills 50% of the exposed animal				
ppm   Concentration expressed in parts of material per million parts					
TD <sub>Io</sub> Lowest dose to cause a symptom					
TCLo	Lowest concentration to cause a symptom				
TD <sub>io</sub> , LD <sub>io</sub> , & LD <sub>o</sub> or	Lowest dose (or concentration) to cause lethal or toxic effects				
TC, TC <sub>o</sub> , LC <sub>lo</sub> , & LC <sub>o</sub>					
IARC	International Agency for Research on Cancer				
NTP	National Toxicology Program				
RTECS	Registry of Toxic Effects of Chemical Substances				
BCF	Bioconcentration Factor				
TLm	Median threshold limit				
log Kow or log Koc	Coefficient of Oil/Water Distribution				

#### **REGULATORY INFORMATION:**

WHMIS	Canadian Workplace Hazardous Material Information System					
DOT	U.S. Department of Transportation					
TC	Transport Canada					
EPA	U.S. Environmental Protection Agency					
DSL Canadian Domestic Substance List						
NOHSC	National Occupational Health and Safety Commission (Australia)					
NDSL	Canadian Non-Domestic Substance List					
PSL	Canadian Priority Substances List					
TSCA	U.S. Toxic Substance Control Act					
EU	European Union (European Union Directive 67/548/EEC)					
WGK	Wassergefährdungsklassen (German Water Hazard Class)					
HMIS-III	National Paint & Coatings Association Hazardous Materials Identification System					

### WORKPLACE HAZARDOUS MATERIALS IDENTIFICATION (WHMIS) SYSTEM:

0	<b>③</b>	<b>(2)</b>		$\odot$	<b>®</b>		
Class A	Class B	Class C	Class D1	Class D2	Class D3	Class E	Class F
Compressed	Flammable	Oxidizing	Toxic	Irritation	Infectious	Corrosive	Reactive

### EC (67/548/EEC) INFORMATION:

F.		2	¥		<b>*</b>	X	×
С	E	F	N	0	Т	Xi	Xn
Corrosive	Explosive	Flammable	Harmful	Oxidizing	Toxic	Irritant	Harmful

#### CLP/GHS (1272/2008/EC) PICTOGRAMS:

			$\Diamond$			<b>(</b>		<b>(1)</b>
GHS01	GHS02	GHS03	GHS04	GHS05	GHS06	GHS07	GHS08	GHS09
Explosive	Flammable	Oxidizer	Pressurized	Corrosive	Toxic	Harmful Irritating	Health Hazard	Environment