



## **SAFETY DATA SHEET**

Section 1: GENERAL INFORMATION		
TRADE NAME (Common Name or Synonym)	CHEMICAL NAME	PREPARED BY
WS-710	Soldering Flux	Metallic Resources
USED IN INDUSTRIAL SOLDERING PROCESSES		
ADDRESS (No., Street, City, State, Zip Code): Metallic Resources, Inc., 2368 East Enterprise Parkwa	ay, Twinsburg, OH 44087	
CONTACT	PHONE NUMBER	
Metallic Resources, Inc.:	(330) 425-3155	
Chemtrec:	(800) 424-9300	
or contact any emergency room within 15 minutes of your	location.	
Section 2: HAZARDS IDENTIFICATION		
Signal Word: Danger		
Hazard statement(s)		
1225 Highly flammable liquid and vapor		
1317 May cause an allergic skin reaction		l i
1319 Causes serious eye irritation		
1334 May cause allergy or asthma symptoms or breathin	ng difficulties if inhaled	$\mathbf{v}$
13354 May cause respiratory irritation		
1336 May cause drowsiness or dizziness		
Precautionary statement(s)		<b>\ C 7</b>
2210 Keep away from heat/sparks/open flames/hot surf	aces – No smoking	
233 Keep container tightly closed		
240 Ground/Bond container and receiving equipment		
261 Avoid breathing dust/fume/gas/mist/vapors/spray		
270 Do not eat, drink or smoke when using this product	t	
273 Avoid release to the environment		
280 Wear protective gloves/protective clothing/eye pro	otection/face protection	
2362 Take off contaminated clothing and wash before re	euse	
2301 + P314 IF SWALLOWED: Get Medical advice/attenti	ion if you feel unwell	
P302 +P352 IF ON SKIN: Wash with plenty of soap and w		
2304 + 341 IF INHALED: If breathing is difficult, remove v	victim to fresh air and keep at rest in	a position comfortable
for breathing		
2305 + 351 IF IN EYES: Rinse continuously with water for	several minutes	
GHS Category		
sopropyl alcohol:		
Flammable liquid- Category 2		

Skin irritation - Category 3 Eye irritation – Category 2A

## POTENTIAL HEALTH EFFECTS:

Eye Contact:Vapors may be irritating, liquid may irritate or damage eye tissue.Ingestion:May result in gastric disturbances such as nausea and vomiting.

	iviay	May cause irritation, headache or dizziness. Rosin has been known to cause occupational								
	asthr	na. Rosin ma	ay cause s	ensitizatio	on by inhal	ation.				
Skin Contact:	Prolo	nged conta	ct may cau	use irritatio	on, dermat	titis or se	nsitizatio	า.		
Chronic:	Not e	established.								
NOTE: Metalli	ic Resources de	oes not reco	mmend, n	nanufactu	re, market	or endo	rse any of	it's prod	ucts for hu	ıman
consumption.								•		
Section 3: C	OMPOSITIO	<b>DN/INFOR</b>	RMATIO	N ON IN	GREDI	ENTS				
	al or Substanc			C.A.S.				W	't. %	
2-Propanol		-	67-63-7				95-9			9%
Glycerine Mist				56-81					-2%	
				0001					_,.	
			~							
Section 4: Fl					<b>.</b>		at 1 E	the Cool		
Eye Contact:	Hold eyelids	•	ish eyes w	hth plenty	of water f	or at leas	st 15 mint	ites. seek	c medical a	ittention i
	irritation per				o o divo oto	المسلم برما ام				برماحة مناطر
Ingestion:	If patient is c			-		•	•	nnel. NEV	/ER give ar	nything by
halet!	mouth to an		•				•			.1
nhalation:	Remove to fr				tificial resp	oration o	r oxygen i	by trained	a personne	21.
	Seek immedi							147.1.1		
Skin Contact:	Remove cont				ed area wi	th soap a	and water	. Wash clo	othing befo	ore reuse.
	irritation per	sists, obtain	medical a	ttention.						
Flash Point: Auto-ignition T Flammable Lin Extinguishing P	<b>nits:</b> Not estab <b>Media:</b> Use ext	Not establisl lished inguishers a	Method: T hed ippropriate			g fire con	nditions.			
Flash Point: Auto-ignition T Flammable Lin Extinguishing I Special Fire Fig	54F (12C) <b>Temperature</b> : I hits: Not estab <b>Vedia:</b> Use ext	Not establisl lished	Method: T hed ippropriate	e for the s		g fire con	nditions.			
Flash Point: Auto-ignition T Flammable Lin Extinguishing M Special Fire Fig Procedures: Section 6: AC	54F (12C) Temperature: I nits: Not estab Media: Use ext hting Stand	Not establisl lished inguishers a dard fire figh <b>CRELEAS</b>	Method: T hed hppropriate hting equip	e for the s oment SURES	urroundin	-				
Flash Point: Auto-ignition T Flammable Lin Extinguishing M Special Fire Fig Procedures: Section 6: AC	54F (12C) Temperature: I nits: Not estab Media: Use ext hting Stand	Not establish lished lard fire figh <b>RELEAS</b> DO NOT equipme cartridge Unnecess Dispose o	Method: T hed oppropriate nting equip <b>E MEAS</b> allow mate nt, such as so may be in sary perso of followin	e for the soment SURES erial to en s gloves ar required. ( nnel away ng all Fede		system o ing on th y absorpt	or waterwa ne quantity tion. Elimi erials in a	y a respiration of the source	ator with c rces of ign labeled me	organic ition. Keep etal drum.
Flash Point: Auto-ignition T Flammable Lin Extinguishing F Special Fire Fig Procedures: Section 6: A ( Spill or Leak Pr	54F (12C) Temperature: I hits: Not estab Media: Use ext hting Stand CCIDENTAI rocedures:	Not establish lished inguishers a dard fire figh <b>RELEAS</b> DO NOT equipme cartridge unnecess Dispose o Special V	Method: T hed oppropriate nting equip <b>E MIEAS</b> allow mate nt, such as so may be n sary perso of followin Vaste Regu	e for the soment SURES erial to en s gloves ar required. ( nnel away ng all Fede	ter sewer nd depend Clean up b 2. Put clear	system o ing on th y absorpt	or waterwa ne quantity tion. Elimi erials in a	y a respiration of the source	ator with c rces of ign labeled me	organic ition. Keep etal drum.
Section 5: FI Flash Point: Auto-ignition 1 Flammable Lim Extinguishing P Special Fire Fig Procedures: Section 6: AC Spill or Leak Pr Spill or Leak Pr Section 7: HA Handling Preca	54F (12C) Temperature: I hits: Not estab Media: Use ext hting Stand CCIDENTAL rocedures: NDLING A	Not establish lished inguishers a dard fire figh <b>CRELEAS</b> DO NOT equipme cartridge unnecess Dispose o Special V ND STOR	Method: T hed oppropriate nting equip <b>E MEAS</b> allow mate allow mate at, such as so may be r sary perso of followin Vaste Regu AGE	e for the soment SURES erial to en s gloves ar required. ( nnel away og all Feder ulations.	ter sewer nd depend Clean up b 2. Put clear	system o ing on th y absorpt n-up mate and Local	or waterwa le quantity tion. Elimi erials in a regulatio	y a respira nate sour properly ns. In the	ator with c rces of ign labeled mo EU refer t	organic ition. Keep etal drum. o the
Flash Point: Auto-ignition T Flammable Lim Extinguishing P Special Fire Fig Procedures: Section 6: AC Spill or Leak Pr	54F (12C) Temperature: I hits: Not estab Media: Use ext hting Stand CCIDENTAL rocedures: NDLING A	Not establish lished inguishers a dard fire figh <b>CRELEAS</b> DO NOT equipme cartridge unnecess Dispose o Special V ND STOR Keep cor	Method: T hed oppropriate ating equip <b>E MEAS</b> allow mate of <b>MEAS</b> allow mate sary perso of followin Vaste Regu <b>AGE</b> ttainers tig	e for the soment SURES erial to en s gloves ar required. ( nnel away og all Feder ulations.	ter sewer nd depend Clean up b 2. Put clear ral, State a	system o ing on th y absorpt n-up mate and Local ot in use.	or waterwa ne quantity tion. Elimi erials in a regulatio Use care	y a respira nate sour properly ns. In the to avoid s	ator with c rces of ign labeled mo EU refer t spills. Wea	organic ition. Keep etal drum. o the r personal
Flash Point: Auto-ignition T Flammable Lin Extinguishing T Special Fire Fig Procedures: Section 6: A( Spill or Leak Pr Section 7: HA Handling Preca	54F (12C) Temperature: I hits: Not estab Viedia: Use ext hting Stand CCIDENTAL rocedures: ANDLING A hutions:	Not establish lished inguishers a dard fire figh <b>CRELEAS</b> DO NOT equipme cartridge unnecess Dispose of Special V ND STOR Keep cor protectiv Store pro away fro	Method: T hed oppropriate ating equip <b>E MEAS</b> allow mate nt, such as sary perso of followin Vaste Regu AGE tainers tig re equipme oduct in tig m sources	e for the soment SURES erial to en s gloves ar required. ( nnel away ng all Feder ulations. ghtly close ent. Grour ghtly cappo	ter sewer nd depend Clean up b 2. Put clear ral, State a	system o ing on th y absorpt and Local ot in use. ers when I containe product	or waterwa ne quantity tion. Elimi erials in a regulatio Use care n in use. Ko ers in a co label for s	y a respira nate sour properly ns. In the to avoid s eep away ol, dry ar specific st	ator with c rces of ign labeled mo EU refer t spills. Wea from sour ea, well ve corage tem	organic ition. Keep etal drum. o the r personal cces of hea entilated operature
Flash Point: Auto-ignition T Flammable Lin Extinguishing P Special Fire Fig Procedures: Section 6: A ( Spill or Leak Pr Section 7: HA Handling Preca	54F (12C) Temperature: I hits: Not estab Media: Use ext hting Stand CCIDENTAL rocedures: ANDLING A hutions: utions:	Not establish lished inguishers a dard fire figh <b>RELEAS</b> DO NOT equipme cartridge unnecess Dispose o Special V <b>ND STOR</b> Keep cor protectiv Store pro away fro requirem	Method: T hed oppropriate nting equip <b>E MIEAS</b> allow mate nt, such as so may be n sary perso of followin Vaste Regu AGE ntainers tig re equipme oduct in tig m sources nents. Rota	e for the soment SURES erial to en s gloves ar required. ( nnel away ng all Feder ulations. ghtly close ent. Grour ghtly cappo s of ignition ate stock t	ter sewer nd depend Clean up b 7. Put clear ral, State a ed when no nd contain ed original n. Refer to co ensure u	system o ing on th y absorpt n-up mate and Local ot in use. ers when l containe product use before	or waterwa ne quantity tion. Elimi erials in a regulatio Use care n in use. Ko ers in a co label for s	y a respira nate sour properly ns. In the to avoid s eep away ol, dry ar specific st	ator with c rces of ign labeled mo EU refer t spills. Wea from sour ea, well ve corage tem	organic ition. Keep etal drum. o the r personal cces of hea entilated operature
Flash Point: Auto-ignition T Flammable Lim Extinguishing P Special Fire Fig Procedures: Section 6: AC Spill or Leak Pr Section 7: HA Handling Preca Storage Preca	54F (12C) Temperature: I hits: Not estab Media: Use ext hting Stand CCIDENTAL rocedures: MDLING A hutions: utions: CPOSURE C	Not establish lished inguishers a dard fire figh CRELEAS DO NOT equipme cartridge unnecess Dispose of Special V ND STOR Keep cor protectiv Store pro away fro requirem	Method: T hed oppropriate nting equip <b>E MEAS</b> allow mate nt, such as sary perso of followin Vaste Regu AGE ntainers tig ve equipme oduct in tig m sources nents. Rota	e for the soment SURES erial to en s gloves ar required. ( nnel away ng all Feder ulations. ghtly close ent. Grour ghtly cappo of ignition ate stock t	ter sewer nd depend Clean up b 2. Put clear ral, State a ed when no nd contain ed original n. Refer to to ensure u	system o ing on th y absorpt and Local ot in use. ers when l containe product use before	or waterwa le quantity tion. Elimi erials in a regulatio Use care in use. Ko ers in a co label for s e expiratio	y a respira nate sour properly ns. In the to avoid s eep away ol, dry ar specific st on date o	ator with c rces of ign labeled mo EU refer t pills. Wea from sour ea, well ve corage tem n the labe	organic ition. Keep etal drum. o the r personal cces of hea entilated operature I.
Flash Point: Auto-ignition T Flammable Lim Extinguishing P Special Fire Fig Procedures: Section 6: AC Spill or Leak Pr Section 7: HA Handling Preca Storage Preca	54F (12C) Temperature: I hits: Not estab Media: Use ext hting Stand CCIDENTAL rocedures: MDLING A hutions: utions: CPOSURE C	Not establish lished inguishers a dard fire figh <b>RELEAS</b> DO NOT equipme cartridge unnecess Dispose o Special V <b>ND STOR</b> Keep cor protectiv Store pro away fro requirem <b>ONTROL</b> Face velo	Method: T hed oppropriate nting equip <b>E MIEAS</b> allow mate nt, such as so may be n sary perso of followin Vaste Regu AGE ntainers tig re equipme oduct in tig m sources nents. Rota <b>S/PERS(</b> ocity >2.1 of ended to k	e for the soment <b>SURES</b> erial to en s gloves ar required. ( nnel away g all Feder ulations. ghtly close ent. Grour ghtly cappo of ignition ate stock t <b>DNAL PR</b> cubic feet/	ter sewer nd depend Clean up b 7. Put clear ral, State a ed when no nd contain ed original n. Refer to co ensure u	system o ing on th y absorpt n-up mate and Local ot in use. ers when l containe product use before <b>TON</b> confined	or waterwa tion. Elimi erials in a regulatio Use care in use. Ko ers in a co label for s e expiratio	y a respira nate sour properly ns. In the to avoid s eep away ol, dry are specific st on date o	ator with c rces of ign labeled mo EU refer t spills. Wea from sour ea, well ve orage tem n the labe	organic ition. Keep etal drum. o the r personal rces of hea entilated operature I.
Flash Point: Auto-ignition T Flammable Lim Extinguishing P Special Fire Fig Procedures: Section 6: AC Spill or Leak Pr	54F (12C) Temperature: In Thits: Not estable Media: Use extended Media: Use extended Med	Not establish lished inguishers a dard fire figh <b>RELEAS</b> DO NOT equipme cartridge unnecess Dispose o Special V <b>ND STOR</b> Keep cor protectiv Store pro away fro requirem <b>ONTROL</b> Face velo	Method: T hed oppropriate nting equip <b>E MIEAS</b> allow mate nt, such as so may be n sary perso of followin Vaste Regu AGE ntainers tig re equipme oduct in tig m sources nents. Rota <b>S/PERS(</b> ocity >2.1 of ended to k	e for the soment <b>SURES</b> erial to en s gloves ar required. ( nnel away g all Feder ulations. ghtly close ent. Grour ghtly cappo of ignition ate stock t <b>DNAL PR</b> cubic feet/	ter sewer nd depend Clean up b v. Put clear ral, State a d when no nd contain ed original n. Refer to to ensure u ROTECT /minute in	system o ing on th y absorpt n-up mate and Local ot in use. ers when l containe product use before <b>TON</b> confined	or waterwa tion. Elimi erials in a regulatio Use care in use. Ko ers in a co label for s e expiratio	y a respira nate sour properly ns. In the to avoid s eep away ol, dry are specific st on date o	ator with c rces of ign labeled mo EU refer t spills. Wea from sour ea, well ve orage tem n the labe	organic ition. Keej etal drum o the r personal rces of hea entilated operature l.

SDS-WS-710	Soldering Flux
Section 8: EXPOSURE CO	ONTROLS/PERSONAL PROTECTION (Continued)
Respirator:	A NIOSH approved or compliant marked air-purifying respirator with a fume/organic chemical cartridge is recommended where airborne concentrations are expected to be
China	elevated.
Skin:	Compatible chemical resistant gloves. Do not use latex gloves.
Other:	Lab coat, sleeve protectors, eyewash fountain in work area. Avoid the use of contact
Mould (Useriania Dreations)	lenses in high fume areas.
Work/Hygienic Practices:	Maintain good housekeeping. Clean up spills immediately. Good personal hygiene is essential. Avoid eating, smoking or drinking in the work area. Wash hands thoroughly with soap and water immediately upon leaving the work area.
Section 9: PHYSICAL AN	D CHEMICAL PROPERTIES
Appearance: Yellow liquid	Boiling Point: Not available
Odor: Alcoholic	Melting Point: Not applicable
Specific Gravity: 0.846+/-0.006	6 <b>pH:</b> Not applicable
Vapor Pressure: Not available	Solubility in Water: Insoluble
Vapor Density: Not established	1
Section 10: STABILITY A	ND REACTIVITY
General:	Stable.
Conditions to Avoid:	Direct heat, open flames and storage in aluminum.
Incompatible Materials:	phosphorus, halogens, anhydrides, monomers, aldehydes, trichlorides
Hazardous Decomposition /	Carbon dioxide/carbon monoxide.
Combustion:	
Hazardous Polymerization:	Will not occur
Section 11: TOXICALOGI	
Carcinogenicity:	NTP: No OSHA: No IARC: No
LD50: Not established.	LC50: Not established.
Section 12: ECOLOGICAI	LINFORMATION
No Data Available	
Section 13: DISPOSAL CC	INSIDERATION
Waste Disposal Method:	Dispose of in accordance with all Federal, State and Local environmental regulations. In Europe follow the Special Waste Regulations.
Section 14: TRANSPORT	INFORMATION
Transport in accordance with a UN1219, Isopropanol,3, PG II	pplicable regulations and requirements.
Section 15: REGULATOR	Y INFORMATION
UNITED STATES CERCLA:	Not subject to any special reporting under the requirements of CERCLA.
TSCA Status:	All ingredients are listed or are exempt from listing (as polymers) under TSCA.
CANADA WHMIS (Canada):	Class B Division 2, Class D Division 2B
California Proposition 65:	When used for soldering and similar applications, the chemicals may be products which are known to some states to cause birth defects or other reproductive harm.
Reach Directive:	This product does not contain any Substances of Very High Concern (SVHC).

## Section 16: OTHER INFORMATION

## ABBREVIATION TERMS:

ACGIH	American Conference of Government Industrial Hygieni	OSHA Occupational Safety and Health Act			
CAS	Chemical Abstracts Service	PEL	Permissible Exposure Limit		
CEPA	Canadian Environmental Protection Act	REL	Recommended Exposure Limit		
IARC	International Agency for Research on Cancer	SARA	Superfund Amendments & Reauthorization Act		
NIOSH	National Institute for Occupational Safety and Health	TSCA	Toxic Substances Control Act		
NTP	National Toxicology Program	N/A	Not Applicable, Not Available		
		lssue D	ate: 5/1/15		
		Revised	Date: 11/22/2022		

Soldering Flux

Disclaimer Notice: The information contained herein in this Safety Data Sheet is believed to be accurate. However, it provides no warranties, either express or implied, and assumes no responsibility for the accuracy or completeness of the data contained herein. The customer/user of this product assumes all liability and risk in the use of this product.