

SAFETY DATA SHEET

1. Identification

1. Identification			
Product identifier	CIROM IRX		
Other means of identification			
SDS number	1ZW		
Materion Code	1ZW		
Manufacturer/Importer/Supplier/Di Manufacturer	stributor information		
Company name Address	Materion Electronic Materials 6070 Parkland Blvd Mayfield Heights, Ohio 44124 United States		
Telephone	1.216.383.4019		
E-mail	Materion-PS@materion.com		
Contact person	Product Stewardship Director		
Emergency phone number	See Section 16		
2. Hazard(s) identification			
Physical hazards	Not classified.		
Health hazards	Acute toxicity, oral	Category 4	
	Acute toxicity, inhalation	Category 4	
	Skin corrosion/irritation	Category 2	
	Serious eye damage/eye irritation	Category 2	
	Specific target organ toxicity, single exposure	Category 3 respiratory tract irritation	
Environmental hazards	Not classified.		
OSHA defined hazards	Not classified.		
Label elements			
Signal word	Warning		
Hazard statement	Harmful if swallowed. Causes skin irritation. Cause respiratory irritation.	auses serious eye irritation. Harmful if inhaled. May	
Precautionary statement			
Prevention	Avoid breathing dust. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear eye protection/face protection. Wear protective gloves.		
Response	If swallowed: Call a poison center/doctor if you feel unwell. Rinse mouth. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a poison center/doctor if you feel unwell. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.		
Storage	Store in a well-ventilated place. Keep containe	er tightly closed. Store locked up.	
Disposal	Dispose of contents/container in accordance w	vith local/regional/national/international regulations.	

Supplemental information

None known.

For further information, please contact the Product Stewardship Department at +1.800.862.4118.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
TRADE SECRET*	*	Proprietary*	≤ 90
TRADE SECRET*	*	Proprietary*	≤ 10

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

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4. First-aid measures	
Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Call a poison center or doctor/physician if you feel unwell.
Skin contact	Remove contaminated clothing. Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
Eye contact	Do not rub eyes. Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get medical advice/attention if you feel unwell.
Most important symptoms/effects, acute and delayed	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause respiratory irritation. Skin irritation. May cause redness and pain.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed.
General information	If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.
5. Fire-fighting measures	
Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	No unusual fire or explosion hazards noted.
6. Accidental release measu	ures

Personal precautions, protective
equipment and emergency
proceduresKeep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear
appropriate protective equipment and clothing during clean-up. Avoid inhalation of dust. Do not
touch damaged containers or spilled material unless wearing appropriate protective clothing.
Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be
contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up	Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Stop the flow of material, if this is without risk.
	Large Spills: Wet down with water and dike for later disposal. Shovel the material into waste container. Following product recovery, flush area with water.
	Small Spills: Sweep up or vacuum up spillage and collect in suitable container for disposal. Clean surface thoroughly to remove residual contamination.
	Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.
7. Handling and storage	
Precautions for safe handling	Minimize dust generation and accumulation. Do not taste or swallow. Avoid breathing dust. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. When using, do not eat, drink or smoke. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities	Store locked up. Store in tightly closed container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

Components		Туре		V	/alue	
TRADE SECRET		PEL			.5 mg/m3 (as uoride)	
US. OSHA Table Z-2 F	Permissible Exposure	Limits (PEL) (29 CFR 19	10.1000)		
Components		Туре		V	/alue	Form
TRADE SECRET		TWA		2	.5 mg/m3	Dust.
				2	.5 mg/m3	Dust.
US. ACGIH Threshold	Limit Values (TLV)					
Components		Туре		V	/alue	
TRADE SECRET		TWA		2	.5 mg/m3	
Components TRADE SECRET US. California Code of Components	Regulations, Title 8,	Type TWA Section Type	5155. Airborne C	ontaminants	.5 mg/m3 ′alue	
TRADE SECRET		PEL		2	.5 mg/m3	
ogical limit values ACGIH Biological Expo	osure Indices (BEI)					
Components	Value		Determinant	Specimen	Sampling	Time
TRADE SECRET	3 mg/l		TRADE	Urine	*	
INADE GEORET	0g,:		SECRET			
	3 mg/l		SECRET TRADE SECRET	Urine	*	

Components	Value	Determinant	Specimen	Sampling Time
	2 mg/l	TRADE SECRET	Urine	*
* - For sampling details, plea	se see the source doc	ument.		
Appropriate engineering controls	applicable, use proo maintain airborne le	cess enclosures, lo evels below recom	ocal exhaust vent mended exposure	ates should be matched to conditions. If ilation, or other engineering controls to e limits. If exposure limits have not been level. Provide eyewash station and safety
ndividual protection measures, s	uch as personal protec	tive equipment		
Eye/face protection	Wear safety glasse		(or goggles).	
Skin protection Hand protection	Wear appropriate c	hemical resistant g	loves.	
Other	Wear appropriate c	hemical resistant c	lothing. Use of a	n impervious apron is recommended.
Respiratory protection	Chemical respirator	with organic vapo	r cartridge.	
Thermal hazards	Wear appropriate th	nermal protective c	lothing, when ne	cessary.
General hygiene considerations		ling the material ar	d before eating,	personal hygiene measures, such as drinking, and/or smoking. Routinely wash taminants.

9. Physical and chemical properties

Appearance	
Physical state	Solid.
Form	Solid.
Color	Not available.
Odor	Not available.
Odor threshold	Not available.
рН	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or explo	sive limits
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	-0.01 hPa estimated
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.

Viscosity	Not available.		
Other information	N - A scored a filling		
Explosive properties	Not explosive.		
Oxidizing properties	Not oxidizing.		
10. Stability and reactivity			
Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.		
Chemical stability	Material is stable under normal conditions.		
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.		
Conditions to avoid	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Contact with incompatible materials.		
Incompatible materials	Strong oxidizing agents.		
Hazardous decomposition products	No hazardous decomposition products are known.		
11. Toxicological information	on		
Information on likely routes of exp	bosure		
Inhalation	Harmful if inhaled.		
Skin contact	Causes skin irritation.		
Eye contact	Causes serious eye irritation.		
Ingestion	Harmful if swallowed.		
Symptoms related to the physical, chemical and toxicological characteristics	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause respiratory irritation. Skin irritation. May cause redness and pain.		
Information on toxicological effect	ts		
Acute toxicity	In high concentrations, vapors are anesthetic and may cause headache, fatigue, dizziness and central nervous system effects. Harmful if inhaled. Harmful if swallowed.		
Skin corrosion/irritation	Causes skin irritation.		
Serious eye damage/eye irritation	Causes serious eye irritation.		
Respiratory or skin sensitization			
Respiratory sensitization	Not a respiratory sensitizer.		
Skin sensitization	This product is not expected to cause skin sensitization.		
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.		
Carcinogenicity	Not classifiable as to carcinogenicity to humans.		
IARC Monographs. Overall E TRADE SECRET (CAS	Proprietary) 3 Not classifiable as to carcinogenicity to humans.		
	d Substances (29 CFR 1910.1001-1053)		
Not listed.	gram (NTP) Report on Carcinogens		
Not listed.			
Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.		
Specific target organ toxicity - single exposure	May cause respiratory irritation.		
Specific target organ toxicity - repeated exposure	Not classified.		
Aspiration hazard	Not an aspiration hazard.		
Material name: CIPOM IPX			

Chronic effects	Prolonged inhalation may be harmful.
12. Ecological information	
Ecotoxicity	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
Persistence and degradability	No data is available on the degradability of this product.
Bioaccumulative potential	No data available.
Mobility in soil	No data available.
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.
13. Disposal considerations	
Disposal instructions	Dispose of this material and its container to hazardous or special waste collection point. Incinerate the material under controlled conditions in an approved incinerator. Dispose of contents/container in accordance with local/regional/national/international regulations.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see:

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Contaminated packaging

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Listed.

Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or

Toxic Substances Control Act (TSCA)

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

Disposal instructions).

disposal.

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

TRADE SECRET (CAS Proprietary)

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous Yes chemical

Classified hazard	Acute toxicity (any route of exposure)
categories	Skin corrosion or irritation
	Serious eye damage or eye irritation
	Specific target organ toxicity (single or repeated exposure)

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.	
TRADE SECRET	Proprietary	≤ 10	

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

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

Not regulated.

Safe Drinking Water Act Contains component(s) regulated under the Safe Drinking Water Act. (SDWA)

US state regulations

California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to www.P65Warnings.ca.gov.

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

Issue date	06-19-2015
Revision date	05-21-2024
Version #	04
Further information	Transportation Emergency Call Chemtrec at: US: 800.424.9300 International: 703.741.5970 Spain: 900.868.538 Switzerland: 0800.564.402 Chemtrec's toll free, mobile-enabled number in Germany – 0800 1817059 South Korea Toll-free Number – 080-880-0468
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Revision information	This document has undergone significant changes and should be reviewed in its entirety.