SAFETY DATA SHEET

T2 Black Section 1. Identification					
			Product no.	:	1450628
Product name	:	T2 Black			
	:	Printing inks, coatings, toners, and related materials			
Relevant identified uses of the					
substance or mixture and uses					
advised against					
Identified uses					
ruchtmeu uses					
Uses advised against	:	Not available			
Manufacturer	:	Inkcups Now, Corp			
		Ink Department			
		310 Andover Street			
		Danvers, MA 01923			
		United States			
		+1 978 646 8980			
0 11 1 1 1					
Supplier's details	:	Inkcups Now, Corp			
		Ink Department 310 Andover Street			
		Danvers, MA 01923 United States			
		+1 978 646 8980			
24 Hour Emergency Phone	1:	800.535.5053 INFOTRAC 24 Hour Spill and Emergency (+1 352			
2. Hour Emergency i none	•	323 3500 outside of North America)			
SDS Email Information	:	compliance@inkcups.com			
	1	· · · · · · · · · · · · · · · · · · ·			
Section 2. Hazards id	lent	ification			
Classification of the substance or	:	SKIN CORROSION/IRRITATION - Category 2			
mixture		SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2			
		SKIN SENSITIZATION - Category 1			
	1	TOTAL TO DEPROPRIENT (F. 111.) G			

EXPOSURE) - Category 1

TOXIC TO REPRODUCTION (Fertility) - Category 2 TOXIC TO REPRODUCTION (Unborn child) - Category 2 SPECIFIC TARGET ORGAN TOXICITY (REPEATED

GHS label elements

Hazard pictograms	
Signal word	: Danger
Hazard statements	: Causes serious eye irritation. Causes skin irritation. May cause an allergic skin reaction. Suspected of damaging fertility or the unborn child. Causes damage to organs through prolonged or repeated exposure.

Precautionary statements

General	:	Read label before use.
Prevention	:	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Wear protective gloves. Wear eye or face protection. Do not breathe vapor. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.
Response	:	Get medical attention if you feel unwell. IF exposed or concerned: Get medical attention. IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.
Storage	:	
Disposal	:	Dispose of contents and container in accordance with all local, regional, national and international regulations.
Supplemental label elements	:	None known.
Hazards not otherwise classified	:	None known.

Section 3. Composition/information on ingredients

Substance/mixture	:	Mixture
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Ingredient name	%	CAS number
Diacrylate Monomer	35 - 50	
1-Vinylhexahydro-2H-azepin-2-one	15 - 20	2235-00-9
Photoinitiator	7 - 10	
Amine Modified Acrylate Oligomer	7 - 10	

Diacrylate Oligomer	3 - 5	
Acrylate Ester Monomers	3 - 5	
Triacrylate Monomer	0.2 - 1	

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact	:	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
Inhalation	:	Remove victim to fresh air and keep at rest in a position comfortable for breathing.\'20 If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Skin contact	:	Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	:	Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : Cause	es serious eye irritation.

Inhalation	:	Exposure to decomposition products may cause a health hazard.	
		Serious effects may be delayed following exposure.	
Skin contact	:	Causes skin irritation. May cause an allergic skin reaction.	
Ingestion	:	Irritating to mouth, throat and stomach.	

Over-exposure signs/symp	<u>ptoms</u>
Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations
Skin contact	: Adverse symptoms may include the following: irritation redness reduced fetal weight increase in fetal deaths skeletal malformations
Ingestion	: Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician	:	In case of inhalation of decomposition products in a fire, symptoms
2 0		may be delayed. The exposed person may need to be kept under
		medical surveillance for 48 hours.
Specific treatments	:	No specific treatment.

Protection of first-aiders	:	No action shall be taken involving any personal risk or without
		suitable training. It may be dangerous to the person providing aid to
		give mouth-to-mouth resuscitation. Wash contaminated clothing
		thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media		
Suitable extinguishing media	:	Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	:	None known.
Specific hazards arising from the chemical	:	In a fire or if heated, a pressure increase will occur and the container may burst.
Hazardous thermal decomposition products	:	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides

		sulfur oxides phosphorus oxides
Special protective actions for fire- fighters	:	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Special protective equipment for fire-fighters	:	Fire-fighters should wear appropriate protective equipment and self- contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	:	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	:	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Environmental precautions	:	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill	:	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large spill	:	Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows.\'20 Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures	:	Put on appropriate personal protective equipment (see Section 8).
		Persons with a history of skin sensitization problems should not be
		employed in any process in which this product is used. Avoid

		exposure - obtain special instructions before use. Avoid exposure
		during pregnancy. Do not handle until all safety precautions have
		been read and understood. Do not get in eyes or on skin or clothing.
		Do not breathe vapor or mist. Do not ingest. If during normal use the
		material presents a respiratory hazard, use only with adequate
		ventilation or wear appropriate respirator. Keep in the original
		container or an approved alternative made from a compatible
		material, kept tightly closed when not in use. Empty containers retain
		product residue and can be hazardous. Do not reuse container.
Advice on general occupational	:	Eating, drinking and smoking should be prohibited in areas where
hygiene		this material is handled, stored and processed. Workers should wash
		hands and face before eating, drinking and smoking. Remove
		contaminated clothing and protective equipment before entering
		eating areas. See also Section 8 for additional information on hygiene
		measures.

Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations.\20 Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Store in accordance with local regulations.\20 Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupat	ional ex	posure	limits

None.

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Appropriate engineering controls	:	If user operations generate dust, fumes, gas, vapor or mist, use
		process enclosures, local exhaust ventilation or other engineering
		controls to keep worker exposure to airborne contaminants below
		any recommended or statutory limits.
Environmental exposure controls	:	Emissions from ventilation or work process equipment should be
		checked to ensure they comply with the requirements of
		environmental protection legislation.\'20 In some cases, fume
		scrubbers, filters or engineering modifications to the process
		equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures		
Hygiene measures	:	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the

		end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection	:	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Skin protection

Hand protection	:	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.\'20 Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
Body protection	:	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Other skin protection	:	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	:	Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.\'20 Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

<u>Appearance</u>		
Physical state	:	liquid
Color	:	Black.
Odor	:	Not available.
Odor threshold	:	Not available.
pН	:	Not available.
Melting point	:	Not available.
Boiling point	:	Not available.
Flash point	:	> 93 °C (199.40 °F) Not Measured. Flashpoint is estimated to be >93°C (>200°F).
Evaporation rate	:	Not available.
Flammability (solid, gas)	:	Not available.
Lower and upper explosive	:	Lower: Not available.
(flammable) limits		Upper: Not available.
Vapor pressure	:	Not available.

Vapor density	:	Not available.
Density	:	1.025 g/cm3
Relative density	:	1.03
Solubility	:	Not available.
Partition coefficient: n-	:	Not available.
octanol/water		
Auto-ignition temperature	:	Not available.
Decomposition temperature	:	Not available.
Viscosity	:	Dynamic: Not available.
		Kinematic: Not available.
Volatile.	:	2.55 %(m) Weight %
		2.62 %(V) Volume %
VOC %	:	0 %(m) Weight %
		0 %(V) Volume %
Coating VOC	:	0 lb/gal

0 lb/gal 0 g/l

Section 10. Stability and reactivity

Reactivity	:	No specific test data related to reactivity available for this product or
		its ingredients.
Chemical stability	:	The product is stable.
Possibility of hazardous reactions	:	Under normal conditions of storage and use, hazardous reactions will
		not occur.
Conditions to avoid	:	No specific data.
Incompatible materials	:	No specific data.
Hazardous decomposition	:	Under normal conditions of storage and use, hazardous
products		decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity		

Product/ingredient name	Result	Species	Dose	Exposure
Diacrylate Monomer				
	LD50 Oral	Rat	5,000 mg/kg	-
Photoinitiator				
	LD50 Oral	Rat	5,000 mg/kg	-
Conclusion/Summary	: Not a	available.		
Irritation/Corrosion				

Conclusion/Summary		
Skin	:	Not available.
Eyes	:	Not available.
Respiratory	:	Not available.

Sensitization

Conclusion/Summary

Skin	:	Not available.
Respiratory	:	Not available.
Mutagenicity		

Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Reproductive toxicity

Conclusion/Summary

Conclusion/Summary : Not available.

Teratogenicity

Conclusion/Summary : Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Aspiration hazard

Not available.

Information on the likely routes of	:	Not available.
exposure		

Potential acute health effects		
Eye contact	:	Causes serious eye irritation.
Inhalation	:	Exposure to decomposition products may cause a health hazard.
		Serious effects may be delayed following exposure.
Skin contact	:	Causes skin irritation. May cause an allergic skin reaction.
Ingestion	:	Irritating to mouth, throat and stomach.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	:	Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	:	Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations
Skin contact	:	Adverse symptoms may include the following: irritation redness reduced fetal weight increase in fetal deaths skeletal malformations
Ingestion	:	Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects	:	Not available.
Potential delayed effects	:	Not available.

Long term exposure

Potential immediate effects	:	Not available.
Potential delayed effects	:	Not available.

Potential chronic health effects

Conclusion/Summary	:	Not available.
General	:	Causes damage to organs through prolonged or repeated exposure.
		Once sensitized, a severe allergic reaction may occur when
		subsequently exposed to very low levels.
Carcinogenicity	:	No known significant effects or critical hazards.
Mutagenicity	:	No known significant effects or critical hazards.
Teratogenicity	:	Suspected of damaging the unborn child.
Developmental effects	:	No known significant effects or critical hazards.
Fertility effects	:	Suspected of damaging fertility.

Numerical measures of toxicity

Acute toxicity estimates
Not available.

Section 12. Ecological information

Toxicity

	_	
Conclusion/Summary	:	Not available.

Persistence and degradability

Conclusion/Summary	:	Not available.
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Mobility in soil

Soil/water partition coefficient	:	Not available.
(KOC)		
Other adverse effects	:	No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods	:	The generation of waste should be avoided or minimized wherever
F		possible.\'20 Disposal of this product, solutions and any by-products
		should at all times comply with the requirements of environmental
		protection and waste disposal legislation and any regional local
		authority requirements. Dispose of surplus and non-recyclable
		products via a licensed waste disposal contractor.\20 Waste should
		not be disposed of untreated to the sewer unless fully compliant with
		the requirements of all authorities with jurisdiction. Waste packaging
		should be recycled. Incineration or landfill should only be considered
		when recycling is not feasible. This material and its container must
		be disposed of in a safe way. Care should be taken when handling
		emptied containers that have not been cleaned or rinsed out. Empty
		·
		containers or liners may retain some product residues. Avoid
		dispersal of spilled material and runoff and contact with soil,
		waterways, drains and sewers.

Section 14. Transport information

Regulatory information	Proper shipping name	UN - Number	Hazard classification	Packing group	Additional information
IATA	Not classified.			-	
IMDG	Not classified.			-	
DOT Classification	Not classified.			-	
Mexico Classification	Not classified.			-	
TDG Class	Not classified.			-	

Section 15. Regulatory information

All components are listed or exempted.	U.S. Federal regulations	:	United States inventory (TSCA 8b):
			All components are listed or exempted.

Clean Air Act Section 112(b)	:	Not listed
Hazardous Air Pollutants (HAPs)		

SARA 302/304 Not applicable.

SARA 304 RQ	:	Not applicable.

SARA 311/312

Classification	:	Immediate (acute) health hazard	
		Delayed (chronic) health hazard	

Composition/information on ingredients

Name	%	Classification
		<u>'</u>
Diacrylate Monomer	35 - 50	AH
1-Vinylhexahydro-2H-azepin-2-	15 - 20	AH, CH
one		
Dhatainitistan	7 10	212 DEL AV 111 TH212 DAMED
Photoinitiator	7 - 10	312 DELAY HLTH312 IMMED HLTHCH
		nlinch
Amine Modified Acrylate	7 - 10	312 DELAY HLTH312 IMMED
Oligomer Actylate	7 - 10	HLTH312 REACTIVEAH
Ongoiner		TIETTISTE REFICIT VENT
Diacrylate Oligomer	3 - 5	312 IMMED HLTH312
v g		REACTIVEAH
Acrylate Ester Monomers	3 - 5	312 IMMED HLTH312
		REACTIVEAH
Triacrylate Monomer	0.2 - 1	312 DELAY HLTH312
		REACTIVE312 IMMED HLTHAH

International regulations

International lists	:	Australia inventory (AICS): Not determined. Canada inventory
		(DSL/NDSL): Not determined.
		Europe inventory: Not determined.
		Japan inventory: Not determined.
		China inventory (IECSC): Not determined.
		Korea inventory: Not determined.
		New Zealand Inventory of Chemicals (NZIoC): Not determined.
		Philippines inventory (PICCS): Not determined.

Section 16. Other information

History

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Version	:	1.7
Prepared by	:	compliance@inkcups.com
References	:	Not available.

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