SAFETY DATA SHEET



VW175E2U0P

Section 1. Identif	ication
GHS product identifier	: XCURA EVO Process Cyan
Product type	: Liquid.
SDS #	: 9lba:k2ic:8j8
Relevant identified uses of	the substance or mixture and uses advised against
Identified uses	
Printing ink or Additive	
Uses advised against Not applicable.	Reason
Supplier's details	: Flint Group 14909 North Beck Road Plymouth, MI 48170 United States of America
Emergency telephone number (with hours of operation)	 For Product Questions call: +1 (864) 579-3870 For Health and Safety Questions call: +1 (734) 781-4600 After Hours Emergency Health/Safety Questions: 24 Hour Emergency Spill Contact: +1 (800) 424-9300 Chemtrec (US/Canada)
Section 2. Hazard	Is identification
OSHA/HCS status	: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Classification of the substance or mixture	: SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1
<u>GHS label elements</u> Hazard pictograms	
Signal word	: Warning
Hazard statements	: Causes serious eye irritation. May cause an allergic skin reaction.
Precautionary statements	
Prevention	: Wear protective gloves. Wear eye or face protection. Avoid breathing vapor. Wash hands thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace.
Response	: IF ON SKIN: Wash with plenty of soap and water. 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	: Not applicable.
Disposal	 Dispose of contents and container in accordance with all local, regional, national and international regulations.
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Section 2. Hazards identification

Hazards not otherwise : None known. classified

Section 3. Composition/information on ingredients

Substance/mixture

: Mixture

Ingredient name	%	CAS number
VRD433-0090B Proprietary Acrylated Resin	7 - 13	VRD433-0090B
VRD444-0209A Polyol acrylate	7 - 13	VRD444-0209A
2,4-diethyl-9H-thioxanthen-9-one	1 - 5	82799-44-8
4,4-bis(diethylamino)benzophenone	1 - 5	90-93-7
P0361 Proprietary Photoinitiator	1 - 5	P0361
phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide	1 - 5	162881-26-7
2-ethylhexyl 4-(dimethylamino)benzoate	1 - 5	21245-02-3
VRD433-0090C Proprietary Polyol Acrylate	.5 - 1.5	VRD433-0090C

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

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. 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 adverse health effects persist or are severe. 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 if adverse health effects persist or are severe. 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

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Section 4. First aid measures

Section 4. First a	u 1116a5u165
Eye contact	: Causes serious eye irritation.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: May cause an allergic skin reaction.
Ingestion	: No known significant effects or critical hazards.
Over-exposure signs/symp	<u>otoms</u>
Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: No specific data.
Skin contact	: Adverse symptoms may include the following: irritation redness
Ingestion	: No specific data.
Indication of immediate med	dical attention and special treatment needed, if necessary
Notes to physician	: 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.
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-fig	hting 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. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides sulfur oxides phosphorus oxides halogenated compounds metal oxide/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.

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Section 6. Accidental release measures

Personal precautions, protect	ive 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 specialized 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). Water polluting material. May be harmful to the environment if released in large quantities.
Methods and materials for co	ntainment 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. 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. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Avoid release to the environment. 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 hygiene	: Eating, drinking and smoking should be prohibited in areas where 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. 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.

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Section 8. Exposure controls/personal protection

Control parameters

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Occupational exposure limits
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None.

Appropriate engineering	Good general ventilation should be sufficient to control worker exposure to airborne
controls	contaminants.

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. 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	: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

<u>Appearance</u>	
Physical state	: Liquid.
Color	: Blue.
Odor	: Not available.
Odor threshold	: Not available.
рН	: Not available.
Melt point/Freeze point	: Not available.
Boiling point	: Not available.
Flash point	: Higher than 93.3°C (200°F).
Evaporation rate	: Not available.
Flammability (solid, gas)	: Not available.

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Section 9. Physical and chemical properties

Lower and upper explosive (flammable) limits	:	Not available.
Vapor pressure	:	Not available.
Vapor density	:	Not available.
Relative density	:	Not available.
Solubility	:	Not available.
Partition coefficient: n- octanol/water	:	Not available.
Auto-ignition temperature	:	Not available.
Decomposition temperature	:	Not available.
Viscosity	:	Not available.
Density	:	9,89 lbs/gal
VOC data		
VOC % by weight	:	0.85
VOC % by volume	:	1.01
VOC lbs/gallon	:	0.08
VOC lbs/gal less water	:	0.08

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 products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.		

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Not available.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
4,4-bis(diethylamino)benzophenone	Category 3	Not applicable.	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

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Section 11. Toxicological information

Not available.

Information on the likely routes of exposure	:	Not available.		
Potential acute health effects	2			
Eye contact	:	Causes serious eye irritation.		
Inhalation	:	No known significant effects or critical hazards.		
Skin contact	:	May cause an allergic skin reaction.		
Ingestion	:	No known significant effects or critical hazards.		
Symptoms related to the phy	<u>vsio</u>	cal, chemical and toxicological characteristics		
Eye contact	:	Adverse symptoms may include the following: pain or irritation watering redness		
Inhalation	:	No specific data.		
Skin contact	:	Adverse symptoms may include the following: irritation redness		
Ingestion	:	No specific data.		
Delayed and immediate offer	40	and also abrania affects from about and long term superior		
Short term exposure	.15	and also chronic effects from short and long 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				
Not available.				
General	:	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	:	No known significant effects or critical hazards.		
Developmental effects	:	No known significant effects or critical hazards.		
Fertility effects	:	No known significant effects or critical hazards.		
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Section 12. Ecological information

Toxicity

Not available.

Persistence and degradability

Not available.

Bioaccumulative potential

Not available.

Mobility in soil

Not available.

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 possible. 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. 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

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	DOT Classification	TDG Classification	IMDG	ΑΤΑΙ
UN number	UN3082	UN3082	UN3082	UN3082
UN proper shipping name	Environmentally hazardous substance, liquid, n.o.s. (2-benzyl- 2-dimethylamino- 4-morpholinobutyrophenone, 4,4-bis(diethylamino) benzophenone).	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Acrylated resin, 2-benzyl- 2-dimethylamino- 4-morpholinobutyrophenone)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Acrylated resin, 2-benzyl- 2-dimethylamino- 4-morpholinobutyrophenone)	Environmentally hazardous substance, liquid, n.o.s. (Acrylated resin, 2-benzyl- 2-dimethylamino- 4-morpholinobutyrophenone)
Transport hazard class(es)	9	9	9	9
Packing group	III	111	111	111
Environmental hazards	Yes.	Yes.	Yes.	Yes.
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Section 14. Transport information

Additional informationNon-bulk packages of this product are not regulated as hazardous materials unless transported by inland waterway. This product is not regulated as a hazardous material when transported in sizes of ≤5 L or ≤5 kg, provided the general provisions of §§ 173.24 and 173.24a.Product classified as per the following sections of the Transported in packagings meet the general provisions of §§ 173.24 and 173.24a.This product is not regulated as a dangerous good when transported in sizes of 4.1.4.1.2. and 4.1.1.4 to 4.1.1.8.This product is not regulated as a dangerous good when transported in sizes of 4.1.4.1.1.2. and 4.1.1.4 to 4.1.1.8.This product is not regulated as a dangerous good when transported in sizes of 4.1.4.1.1.2. and 4.1.1.4 to 4.1.1.8.This product is not regulated as a dangerous good when transported in sizes of 4.1.4.1.1.2. and 4.1.1.4 to 4.1.1.8.This product is not regulated as a dangerous good when transported in sizes of 4.1.4.1.1.2. and 4.1.1.4 to 4.1.1.8.This product is not regulated as a dangerous good when transported in sizes of 4.1.1.4.Limited quantity Yes.Explosive Limit and Limited Quantity Index 5Non-bulk packaging tinstructions: 964This product is not regulated as a dangerous good when transported in sizes of 4.1.1.4.This product is not regulated as a dangerous good when transported in sizes of 4.1.1.4.Limited quantity Yes.Special provisions 1.4.1.7. TP1, TP29Special provisions 1.6This product is not regulated as a dangerous good when transported in sizes of 4.1.1.1.4.This product is not regulated as a to 4.1.1.8.

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Section 15. Regulatory information

U.S. Federal regulations	: United States inventory (TSCA 8b): All components are listed or exempted.
<u>SARA 311/312</u>	
Classification	: Immediate (acute) health hazard

Section 16. Other information

<u>History</u>	
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Section 16. Other information

Key to abbreviations	 ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Internediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient
	LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) UN = United Nations

✓ Indicates information that has changed from previously issued version.

Notice to reader

Flint Group has prepared this Safety Data Sheet ("SDS") in compliance with 29 CFR 1910.1200, understands that its customers may use this SDS to comply with that section, and believes that the data set forth herein are accurate as of the date hereof; however, this SDS shall not constitute a warranty with respect thereto.