WATSON STANDARD ISO 9001

SAFETY DATA SHEET

Issue Date 25-Feb-2015 **Revision Date** 11-Sep-2018 **Version** 2

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier
Product Code UV/DFA-609

Recommended use of the chemical and restrictions on use
Recommended Use Reserved for industrial and professional use.

Details of the supplier of the safety data sheet
Supplier Address
Watson Standard Adhesives Co. D.B.A Watson Standard
1360 Low Grade Road
Harwick PA, 15049
USA
+1-724-275-1000

Emergency telephone number
Emergency Telephone Chemtrec USA 1-800-424-9300
Chemtrec International +1 703-741-5970

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status
This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Reproductive toxicity	Category 2
Chronic aquatic toxicity	Category 2

Hazard symbol(s) /Pictogram(s)

Emergency Overview

Warning

Hazard statements
H315 - Causes skin irritation
H319 - Causes serious eye irritation
H361 - Suspected of damaging fertility or the unborn child
H411 - Toxic to aquatic life with long lasting effects

Precautionary Statements - Prevention
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required
Wash face, hands and any exposed skin thoroughly after handling
Avoid release to the environment

Precautionary Statements - Response
IF exposed or concerned: Get medical advice/attention
Specific treatment (see Section 4 / First Aid on this label)
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 advice/attention
IF ON SKIN: Wash with plenty of soap and water
If skin irritation occurs: Get medical advice/attention
Take off contaminated clothing and wash before reuse
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Call a POISON CENTER or doctor if you feel unwell
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
Rinse mouth
In case of fire: Use CO2, dry chemical, or foam for extinction
Evacuate area and fight fire from a safe distance
Collect spillage

Precautionary Statements - Storage
Store locked up

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)
Not Applicable

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity 0 % of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No	Weight-%
Trade Secret Resin	Proprietary	30 - 60
Trade Secret Triacrylate	Proprietary	10 - 30
Ethoxylated Phenol Monoacrylate	56641-05-5	5 - 10
Trade Secret Diacrylate	Proprietary	1 - 5
Phenylbis (2,4,6-Trimethylbenzoyl) phosphine oxide	162881-26-7	1 - 5
Trade Secret Photoinitiator	Proprietary	1 - 5
Benzoyl Isopropanol	7473-98-5	1 - 5
Toluene	108-88-3	0.1 - 1
2-Propenoic Acid	79-10-7	0.1 - 1

4. FIRST AID MEASURES

First aid measures

Eye contact 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 advice/attention.

Skin Contact Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If symptoms persist, call a physician.

Inhalation Move to fresh air in case of accidental inhalation of vapors. If symptoms persist, call a physician.

Ingestion If swallowed, call a poison control center or physician immediately. Never give anything by mouth to an unconscious person. Do not induce vomiting without medical advice.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media
Carbon dioxide (CO2). Extinguishing powder. Dry chemical. Alcohol resistant foam. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical
No information available.

Explosion data
Sensitivity to Mechanical Impact No.
Sensitivity to Static Discharge Yes.

Protective equipment and precautions for firefighters
Wear self-contained breathing apparatus and protective suit.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Ensure adequate ventilation, especially in confined areas. Avoid contact with skin, eyes or clothing. All equipment used when handling the product must be grounded. Use personal protection recommended in Section 8. Wash thoroughly after handling.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Pick up and transfer to properly labeled containers. Soak up with inert absorbent material. Clean contaminated surface thoroughly. Prevent product from entering drains. Take precautionary measures against static discharges. Sweep up and shovel into suitable containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Avoid contact with skin, eyes or clothing. Do not breathe dust/fume/gas/mist/vapors/spray. Wash contaminated clothing before reuse. Take precautionary measures against static discharges. Use spark-proof tools and explosion-proof equipment. Ensure adequate ventilation, especially in confined areas. Remove all sources of ignition. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Never pierce, drill, grind, cut, saw or weld any empty container.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible materials Strong oxidizing agents. Strong acids. Strong bases.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH	Exposure Limits
Toluene 108-88-3	TWA: 20 ppm	TWA: 200 ppm (vacated) TWA: 100 ppm (vacated) TWA: 375 mg/m^3	IDLH: 500 ppm TWA: 100 ppm TWA: 375 mg/m^3	Mexico: TWA 50 ppm Mexico: TWA 188 mg/m^3

		(vacated) STEL: 150 ppm (vacated) STEL: 560 mg/m³ Ceiling: 300 ppm	STEL: 150 ppm STEL: 560 mg/m³	
2-Propenoic Acid 79-10-7	TWA: 2 ppm S*	(vacated) TWA: 10 ppm (vacated) TWA: 30 mg/m³ (vacated) S*	TWA: 2 ppm TWA: 6 mg/m³	-

NIOSH IDLH Immediately Dangerous to Life or Health

Other Information Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Appropriate engineering controls

Engineering Controls Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin and body protection Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Respiratory protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state liquid
Odor Acrylates
Color yellow
Appearance Transparent
Odor threshold No information available

Property	Values	Remarks • Method
pH	No information available	
Melting point / freezing point	No information available	
Boiling point / boiling range	> 93.3 °C	
Flash Point	> 93.3 °C / > 200.0 °F	Pensky-Martens Closed Cup (PMCC)
Evaporation rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	No information available	
Lower flammability limit:	No information available	
Vapor pressure	No information available	
Vapor density	No information available	
Specific Gravity	1.15	
Water solubility	Insoluble in water	
Solubility in other solvents	No information available	
Partition coefficient	No information available	
Autoignition temperature	No information available	
Decomposition temperature	No information available	
Kinematic viscosity	1571.7 mm2/s	
Dynamic viscosity	No information available	
Explosive properties	No information available	

Oxidizing properties No information available

Other Information

Softening point No information available
Molecular weight No information available
VOC Content (%) No information available
Liquid Density 9.54 lb/gal
Bulk density No information available

10. STABILITY AND REACTIVITY

Reactivity
Not Applicable

Chemical stability
Stable under normal conditions.

Possibility of Hazardous Reactions
None under normal processing.

Hazardous polymerization Hazardous polymerization does not occur.

Conditions to avoid
Extremes of temperature and direct sunlight. Incompatible materials.

Incompatible materials
Strong oxidizing agents. Strong acids. Strong bases.

Hazardous Decomposition Products
None under normal use conditions. Thermal decomposition can lead to release of irritating and toxic gases and vapors. Carbon dioxide (CO2). Hydrocarbons.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation No data available.

Eye contact No data available.

Skin Contact No data available.

Ingestion No data available.

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Trade Secret Triacrylate	-	> 13 g/kg (Rabbit)	-
Trade Secret Diacrylate	= 500 mg/kg (Rat)	= 1900 mg/kg (Rabbit)	-
Toluene 108-88-3	= 2600 mg/kg (Rat)	= 2600 mg/kg (Rat)	= 2600 mg/kg (Rat)
2-Propenoic Acid 79-10-7	= 193 mg/kg (Rat) = 33500 µg/kg (Rat)	= 280 µL/kg (Rabbit) = 295 mg/kg (Rabbit)	= 11.1 mg/L (Rat) 1 h = 3.6 mg/L (Rat) 4 h

Information on toxicological effects

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization No information available.
Germ cell mutagenicity No information available.
Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA	Mexico
Toluene 108-88-3	-	Group 3	-	-	-
2-Propenoic Acid 79-10-7	-	Group 3	-	-	-

IARC (International Agency for Research on Cancer)
Not classifiable as a human carcinogen

Reproductive toxicity No information available.
STOT - single exposure No information available.
STOT - repeated exposure No information available.
Chronic toxicity Repeated contact may cause allergic reactions in very susceptible persons. Avoid repeated exposure.
Aspiration hazard No information available.

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity 0 % of the mixture consists of ingredient(s) of unknown toxicity

12. ECOLOGICAL INFORMATION

Ecotoxicity

0 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical name	Algae/aquatic plants	Fish	Crustacea
Benzoyl Isopropanol 7473-98-5	0.64 mg/l	160 mg/l	-
Toluene 108-88-3	12.5: 72 h Pseudokirchneriella subcapitata mg/L EC50 static 433: 96 h Pseudokirchneriella subcapitata mg/L EC50	15.22 - 19.05: 96 h Pimephales promelas mg/L LC50 flow-through 12.6: 96 h Pimephales promelas mg/L LC50 static 5.89 - 7.81: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 54: 96 h Oryzias latipes mg/L LC50 static 11.0 - 15.0: 96 h Lepomis macrochirus mg/L LC50 static 50.87 - 70.34: 96 h Poecilia reticulata mg/L LC50 static 5.8: 96 h Oncorhynchus mykiss mg/L LC50 semi-static 14.1 - 17.16: 96 h Oncorhynchus mykiss mg/L LC50 static 28.2: 96 h Poecilia reticulata mg/L LC50 semi-static	5.46 - 9.83: 48 h Daphnia magna mg/L EC50 Static 11.5: 48 h Daphnia magna mg/L EC50
2-Propenoic Acid 79-10-7	0.04: 72 h Desmodesmus subspicatus mg/L EC50 0.17: 96 h Pseudokirchneriella subcapitata mg/L EC50	222: 96 h Brachydanio rerio mg/L LC50 semi-static	270: 24 h Daphnia magna mg/L LC50 Static 95: 48 h Daphnia magna mg/L EC50

Persistence and degradability
No information available.

Bioaccumulation
No information available.

Chemical name	Partition coefficient
Toluene 108-88-3	2.7
2-Propenoic Acid 79-10-7	0.46

Other adverse effects No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes Residual vapors may explode on ignition. Never pierce, drill, grind, cut, saw or weld any empty container. Disposal should be in accordance with applicable regional, national and local laws and regulations. Since empty containers retain product residue, follow label warnings even after container is emptied.

14. TRANSPORT INFORMATION

DOT

UN/ID No.	UN3082
Proper shipping name	Environmentally hazardous substances, liquid, n.o.s. (Benzoyl Isopropanol)
Hazard Class	9
Packing Group	III
Marine pollutant	Yes.

TDG

UN/ID No.	UN3082
Proper shipping name	Environmentally hazardous substances, liquid, n.o.s. (Benzoyl Isopropanol)
Hazard Class	9
Packing Group	III
Marine pollutant	yes.

MEX

UN/ID No.	UN3082
Proper shipping name	Environmentally hazardous substances, liquid, n.o.s. (Benzoyl Isopropanol)
Hazard Class	9
Packing Group	III

IATA

UN/ID No.	UN3082
Proper shipping name	Environmentally hazardous substances, liquid, n.o.s. (Benzoyl Isopropanol)
Hazard Class	9
Packing Group	III

IMDG

UN/ID No.	UN3082
Proper shipping name	Environmentally hazardous substances, liquid, n.o.s. (Benzoyl Isopropanol)
Hazard Class	9
Packing Group	III
Marine pollutant	yes

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL/NDSL	Not Determined
EINECS/ELINCS	Not Determined
ENCS	Not Determined
IECSC	Not Determined
KECL	Not Determined
PICCS	Not Determined
AICS	Not Determined

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical name	SARA 313 - Threshold Values %
Ethoxylated Phenol Monoacrylate - 56641-05-5	1.0

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	Yes
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

US State Regulations

This product may contain substances regulated by state right-to-know regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania	Pennsylvania - Special Hazardous Substances	Pennsylvania - Environmental Hazard List
Ethoxylated Phenol Monoacrylate 56641-05-5	X	-	X	-	-
Toluene 108-88-3	X	X	X	-	X
2-Propenoic Acid 79-10-7	X	X	X	-	X
Phenol (impurity) 108-95-2	X	X	X	-	X
Butylated Hydroxytoluene 128-37-0	X	X	X	-	-
Hydroquinone 123-31-9	X	X	X	-	X
1-dodecane-1-thiol 112-55-0	X	-	X	-	-

16. OTHER INFORMATION

Issue Date	25-Feb-2015
Revision Date	11-Sep-2018
Revision Note	Not Applicable

Disclaimer

The information contained herein is derived from data provided by suppliers and other sources believed to be reliable, and is furnished without warranty of any kind. The information relating to the product is for guidance purposes only, is based only on downstream uses known to Watson Standard, and may not be valid for the product used in combination with any other materials. Users of this product must make determinations of suitability and completeness of information from this and all other sources to ensure proper use and disposal of this product, safety and health of employees, customers, and the protection of the environment. Watson Standard will not be liable for any special, incidental, or consequential damages associated with the use or handling of the product.

End of Safety Data Sheet