

SAFETY DATA SHEET

Revision Date 11-Jul-2017

Version 1

1. IDENTIFICATION

Product identifier

Product Name 1:1 CLEAR MED ACTIVATOR

Other means of identification

Product Code DF-658-2L

UN/ID no. UN1263

SKU(s) DF-658-2L

Recommended use of the chemical and restrictions on use

Recommended Use No information available.

Uses advised against No information available

Details of the supplier of the safety data sheet

Supplier Address

Vogel Automotive Coatings

1020 Albany Place SE

Orange City, IA 51041

Phone: 712-737-4993

Fax: 712-737-4997

Emergency telephone number

Emergency Telephone Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin corrosion/irritation	Category 2
Respiratory sensitization	Category 1
Skin sensitization	Category 1
Germ cell mutagenicity	Category 1B
Carcinogenicity	Category 1B
Reproductive toxicity	Category 2
Specific target organ toxicity (single exposure)	Category 3
Specific target organ toxicity (repeated exposure)	Category 2
Aspiration toxicity	Category 1
Flammable liquids	Category 2

Emergency Overview

Danger

Hazard statements

Causes skin irritation

May cause allergy or asthma symptoms or breathing difficulties if inhaled

May cause an allergic skin reaction

May cause genetic defects

May cause cancer

Suspected of damaging fertility or the unborn child

May cause drowsiness or dizziness

May cause damage to organs through prolonged or repeated exposure

May be fatal if swallowed and enters airways

Highly flammable liquid and vapor

Polymeric Isocyanate	28182-81-2	10 - 30	*
Polymeric IPDI	53880-05-0	7 - 13	*
Aromatic 100	64742-95-6	1 - 5	*
p-Toluenesulfonyl Isocyanate	4083-64-1	0.1 - 1	*

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

General advice	Immediate medical attention is required. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). If symptoms persist, call a physician.
Eye contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician.
Skin Contact	Wash off immediately with plenty of water. Wash contaminated clothing before reuse. If skin irritation persists, call a physician. Immediate medical attention is not required. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. In the case of skin irritation or allergic reactions see a physician. Wash contaminated clothing before reuse.
Inhalation	Remove to fresh air. Call a physician. If breathing is irregular or stopped, administer artificial respiration. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Immediate medical attention is not required. Move to fresh air in case of accidental inhalation of vapors. If symptoms persist, call a physician. May cause allergic respiratory reaction.
Ingestion	Do NOT induce vomiting. Rinse mouth. If symptoms persist, call a physician. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Call a physician.
Self-protection of the first aider	Remove all sources of ignition. Use personal protective equipment as required.
<u>Most important symptoms and effects, both acute and delayed</u>	
Symptoms	May cause allergic skin reaction. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
<u>Indication of any immediate medical attention and special treatment needed</u>	
Note to physicians	Treat symptomatically. Symptoms may be delayed. May cause sensitization by skin contact. May cause sensitization by inhalation and skin contact.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media CAUTION: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical

Flammable.

Hazardous combustion products Carbon monoxide. Carbon dioxide (CO₂). Nitrogen oxides (NO_x).

Explosion data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures**Personal precautions**

Remove all sources of ignition. Evacuate personnel to safe areas. Ensure adequate ventilation, especially in confined areas. Use personal protective equipment as required. Keep people away from and upwind of spill/leak.

Environmental precautions**Environmental precautions**

Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. See Section 12 for additional ecological information.

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. Dam up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Soak up with inert absorbent material.

7. HANDLING AND STORAGE

Precautions for safe handling**Advice on safe handling**

Ensure adequate ventilation, especially in confined areas. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Take precautionary measures against static discharges. Use spark-proof tools and explosion-proof equipment. All equipment used when handling the product must be grounded. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Use with local exhaust ventilation. Use personal protective equipment as required. Do not breathe dust/fume/gas/mist/vapors/spray.

Conditions for safe storage, including any incompatibilities**Storage Conditions**

Keep tightly closed in a dry and cool place. Keep in properly labeled containers. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep containers tightly closed in a cool, well-ventilated place.

Incompatible materials

Strong oxidizing agents. Strong acids. Chlorinated compounds. Incompatible with oxidizing agents. Strong bases. Water. Alcohols. Amines. Copper.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters**Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Butyl Acetate 123-86-4	STEL: 150 ppm TWA: 50 ppm	TWA: 150 ppm TWA: 710 mg/m ³ (vacated) TWA: 150 ppm (vacated) TWA: 710 mg/m ³ (vacated) STEL: 200 ppm (vacated) STEL: 950 mg/m ³	IDLH: 1700 ppm TWA: 150 ppm TWA: 710 mg/m ³ STEL: 200 ppm STEL: 950 mg/m ³

Toluene 108-88-3	TWA: 20 ppm	TWA: 200 ppm (vacated) TWA: 100 ppm (vacated) TWA: 375 mg/m ³ (vacated) STEL: 150 ppm (vacated) STEL: 560 mg/m ³ Ceiling: 300 ppm	IDLH: 500 ppm TWA: 100 ppm TWA: 375 mg/m ³ STEL: 150 ppm STEL: 560 mg/m ³
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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 Tight sealing safety goggles. Face protection shield.

Skin and body protection Wear protective gloves and protective clothing.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.

General Hygiene Considerations When using do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing is recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	liquid	Odor	No information available
Appearance	No information available	Odor threshold	No information available
Color	No information available		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No information available	
Melting point/freezing point	No information available	
Boiling point / boiling range	>= 110 °C / 230 °F	
Flash point	7 °C / 45 °F	
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	0.95	
Water solubility	No information available	
Solubility in other solvents	No information available	
Partition coefficient	No information available	
Autoignition temperature	No information available	
Decomposition temperature	No information available	
Kinematic viscosity	No information available	
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
Density	7.95 lbs/gal
Bulk density	No information available
Percent solids by weight	31.9%
Percent volatile by weight	68.1%
Percent solids by volume	26.0%
Actual VOC (lbs/gal)	5.4
Actual VOC (grams/liter)	648.7
EPA VOC (lbs/gal)	5.4
EPA VOC (grams/liter)	648.7
EPA VOC (lb/gal solids)	20.9

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

Heat, flames and sparks.

Incompatible materials

Strong oxidizing agents. Strong acids. Chlorinated compounds. Incompatible with oxidizing agents. Strong bases. Water. Alcohols. Amines. Copper.

Hazardous Decomposition Products

Carbon oxides.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information	No data available
Inhalation	May cause sensitization by inhalation.
Eye contact	May cause irritation.
Skin Contact	May cause irritation. May cause sensitization by skin contact.
Ingestion	No data available.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Butyl Acetate 123-86-4	= 10768 mg/kg (Rat)	> 17600 mg/kg (Rabbit)	= 390 ppm (Rat) 4 h
Toluene 108-88-3	= 2600 mg/kg (Rat)	= 12000 mg/kg (Rabbit)	= 12.5 mg/L (Rat) 4 h
Polymeric Isocyanate 28182-81-2	-	-	= 18500 mg/m ³ (Rat) 1 h
Polymeric IPDI 53880-05-0	> 14000 mg/kg (Rat)	-	-
Aromatic 100 64742-95-6	= 8400 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	= 3400 ppm (Rat) 4 h
p-Toluenesulfonyl Isocyanate 4083-64-1	= 2234 mg/kg (Rat)	-	> 640 ppm (Rat) 1 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 May cause sensitization by inhalation and skin contact.

Germ cell mutagenicity No information available.

Carcinogenicity No information available.

Chemical Name	ACGIH	IARC	NTP	OSHA
Toluene 108-88-3	-	Group 3	-	-

IARC (International Agency for Research on Cancer)

Group 3 - Not classifiable as a human carcinogen

Reproductive toxicity Product is or contains a chemical which is a known or suspected reproductive hazard.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Chronic toxicity Contains a known or suspected reproductive toxin. Avoid repeated exposure. May cause adverse liver effects.

Target Organ Effects Central nervous system, Eyes, kidney, liver, Respiratory system, Skin.

Aspiration hazard No information available.

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document mg/kg mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

Harmful to aquatic life with long lasting effects

32.09% of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Butyl Acetate 123-86-4	674.7: 72 h Desmodesmus subspicatus mg/L EC50	100: 96 h Lepomis macrochirus mg/L LC50 static 17 - 19: 96 h Pimephales promelas mg/L LC50 flow-through 62: 96 h Leuciscus idus mg/L LC50 static	72.8: 24 h Daphnia magna mg/L EC50
Toluene 108-88-3	433: 96 h Pseudokirchneriella subcapitata mg/L EC50 12.5: 72 h Pseudokirchneriella subcapitata mg/L EC50 static	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 11.0 - 15.0: 96 h Lepomis macrochirus mg/L LC50 static 50.87 - 70.34: 96 h Poecilia reticulata mg/L LC50 static 54: 96 h Oryzias latipes 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
Aromatic 100 64742-95-6	-	9.22: 96 h Oncorhynchus mykiss mg/L LC50	6.14: 48 h Daphnia magna mg/L EC50

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Chemical Name	Partition coefficient
Butyl Acetate 123-86-4	1.81

Toluene 108-88-3	2.7
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Other adverse effects No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging Do not reuse container.

US EPA Waste Number D001 U220

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Toluene 108-88-3	U220	Included in waste streams: F005, F024, F025, F039, K015, K036, K037, K149, K151	-	U220

Chemical Name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Toluene 108-88-3	-	-	Toxic waste waste number F025 Waste description: Condensed light ends, spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated aliphatic hydrocarbons, by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution.	-

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste Status
Butyl Acetate 123-86-4	Toxic
Toluene 108-88-3	Toxic Ignitable

14. TRANSPORT INFORMATION

DOT

UN/ID no.	UN1263
Proper shipping name	Paint Related Material
Hazard Class	3
Packing Group	II
Special Provisions	149, B52, IB2, T4, TP1, TP8, TP28
Description	UN1263, Paint related material, 3, II,
Emergency Response Guide Number	128

TDG

UN/ID no.	UN1263
Proper shipping name	Paint Related Material
Hazard Class	3
Packing Group	II
Description	UN1263, Paint related material, 3, II

MEX

UN/ID no.	UN1263
Proper shipping name	Paint Related Material
Hazard Class	3
Packing Group	II
Description	UN1263, Paint related material, 3, II

ICAO (air)

UN/ID no.	UN1263
Proper shipping name	Paint Related Material
Hazard Class	3
Packing Group	II
Special Provisions	A3, A72
Description	UN1263, Paint related material, 3, II

IATA

UN/ID no.	UN1263
Proper shipping name	Paint Related Material
Hazard Class	3
Packing Group	II
ERG Code	3L
Special Provisions	A3, A72
Description	UN1263, Paint related material, 3, II

IMDG

UN/ID no.	UN1263
Proper shipping name	Paint related material
Hazard Class	3
Packing Group	II
EmS-No.	F-E, S-E
Special Provisions	163
Description	UN1263, Paint related material, 3, II

RID

UN/ID no.	UN1263
Proper shipping name	Paint Related Material
Hazard Class	3
Packing Group	II
Classification code	F1
Description	UN1263, Paint related material, 3, II

ADR

UN/ID no.	UN1263
Proper shipping name	Paint Related Material
Hazard Class	3
Packing Group	II
Classification code	F1
Tunnel restriction code	(D/E)
Special Provisions	163, 640D, 650
Description	UN1263, Paint related material, 3, II, (D/E)
Labels	3

ADN

Proper shipping name	Paint Related Material
Hazard Class	3
Packing Group	II

Classification code	F1
Special Provisions	163, 640D, 650
Description	UN1263, Paint related material , 3, II
Hazard label(s)	3
Limited quantity (LQ)	5 L
Ventilation	VE01

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	Does not comply
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

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 %
Toluene	1.0

SARA 311/312 Hazard Categories

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

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Butyl Acetate 123-86-4	5000 lb	-	-	X
Toluene 108-88-3	1000 lb	X	X	X

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Butyl Acetate 123-86-4	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ

Toluene 108-88-3	1000 lb 1 lb	-	RQ 1000 lb final RQ RQ 454 kg final RQ RQ 1 lb final RQ RQ 0.454 kg final RQ
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US State Regulations**California Proposition 65**

This product contains the following Proposition 65 chemicals

Chemical Name	California Proposition 65
Toluene - 108-88-3	Developmental

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts
Butyl Acetate 123-86-4	X	X
Toluene 108-88-3	X	X

Chemical Name	Pennsylvania
Butyl Acetate 123-86-4	X
Toluene 108-88-3	X

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

Hazardous air pollutants (HAPS) content

LIST OF HAZARDOUS AIR POLLUTANTS SUBJECT TO THE PROVISIONS OF THE CLEAN AIR ACT, TITLE I SECTION 112 'National Emission Standards for Hazardous Air Pollutants' (present individually at 1% by weight, or greater):

Chemical Name	Weight % of HAPS in Product	Pounds HAPS / Gal Product
Toluene 108-88-3	31.94%	2.54

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

NFPA	Health hazards 2	Flammability 3	Instability 0	Physical and Chemical Properties -
HMIS	Health hazards 2 *	Flammability 3	Physical hazards 0	Personal protection X

Chronic Hazard Star Legend * = Chronic Health Hazard

Revision Date 11-Jul-2017

Revision Note

No information available

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. Shipping information may vary based upon container size and shipping destination. Each user of this material needs to evaluate the conditions of use and design the appropriate protective mechanisms to prevent employee exposures, property damage, or release to the environment. The manufacturer assumes no responsibility for injury to the recipient or third persons, or for any damages to any property resulting from misuse of the product.

End of Safety Data Sheet