



Safety Data Sheet

acc. to 29 CFR 1910.1200 App D

Adam's Glass - Ceramic Coating System Part A

Version number: GHS 3.0
Replaces version of: 2019-09-16 (GHS 2)

Revision: 2019-12-05

SECTION 1: Identification

1.1 Product identifier

Trade name

Adam's Glass - Ceramic Coating System Part A

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses

Glass coating

1.3 Details of the supplier of the safety data sheet

Adam's Polishes Inc.
8225 North Valley Hwy.
Thornton CO 80221
720-484-5059

tips@adamspolishes.com
www.adamspolishes.com

1.4 Emergency telephone number

Emergency information service

USA 1.800.535.5053, INTL 1.352.323.3500
24 hour emergency number

SECTION 2: Hazard(s) identification

2.1 Classification of the substance or mixture

Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

Section	Hazard class	Category	Hazard class and category	Hazard statement
A.1O	acute toxicity (oral)	4	Acute Tox. 4	H302
A.2	skin corrosion/irritation	2	Skin Irrit. 2	H315
A.3	serious eye damage/eye irritation	1	Eye Dam. 1	H318
A.4S	skin sensitization	1	Skin Sens. 1	H317
B.6	flammable liquid	2	Flam. Liq. 2	H225

For full text of abbreviations: see SECTION 16.

The most important adverse physicochemical, human health and environmental effects

The product is combustible and can be ignited by potential ignition sources.

2.2 Label elements

Labelling acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

- Signal word danger

- Pictograms

GHS02, GHS05,
GHS07





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- Hazard statements

H225	Highly flammable liquid and vapor.
H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.

- Precautionary statements

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233	Keep container tightly closed.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P261	Avoid breathing dust/fume/gas/mist/vapors/spray.
P270	Do not eat, drink or smoke when using this product.
P272	Contaminated work clothing must not be allowed out of the workplace.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352	If on skin: Wash with plenty of water.
P303+P361+P353	If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305+P351+P338	If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a poison center/doctor.
P321	Specific treatment (see on this label).
P330	Rinse mouth.
P362	Take off contaminated clothing and wash it before reuse.
P363	Wash contaminated clothing before reuse.
P370+P378	In case of fire: Use sand, carbon dioxide or powder extinguisher to extinguish.
P403+P235	Store in a well-ventilated place. Keep cool.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

- Hazardous ingredients for labelling

ambient temperature curable refractory resin A, para-chlorobenzotrifluoride

2.3 Other hazards

Hazards not otherwise classified

- May be harmful if swallowed (GHS category 5: acutely toxic - oral).
- May be harmful in contact with skin (GHS category 5: acutely toxic - dermal).
- Toxic to aquatic life with long lasting effects (GHS category 2: aquatic toxicity - acute and/or chronic).

Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not relevant (mixture)



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3.2 Mixtures

Description of the mixture

Hazardous ingredients acc. to GHS			
Name of substance	Identifier	Wt%	Classification acc. to GHS
ambient temperature curable refractory resin A	CAS No unknown	40 - < 55	Acute Tox. 4 / H302 Skin Corr. 1B / H314 Eye Dam. 1 / H318 Skin Sens. 1 / H317 Flam. Liq. 2 / H225
tert-butyl acetate	CAS No 540-88-5	20 - < 40	Flam. Liq. 2 / H225
parachlorobenzotrifluoride	CAS No 98-56-6	20 - < 40	Skin Sens. 1B / H317 Flam. Liq. 3 / H226

For full text of abbreviations: see SECTION 16. Exact percentage of ingredients is withheld as a trade secret.

SECTION 4: First-aid measures

4.1 Description of first-aid measures

General notes

Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

Following inhalation

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. In case of respiratory tract irritation, consult a physician. Provide fresh air.

Following skin contact

Wash with plenty of soap and water.

Following eye contact

Remove contact lenses, if present and easy to do. Continue rinsing.

Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water spray, BC-powder, Carbon dioxide (CO₂)

Unsuitable extinguishing media

Water jet

5.2 Special hazards arising from the substance or mixture

In case of insufficient ventilation and/or in use, may form flammable/explosive vapor-air mixture. Solvent vapors are heavier than air and may spread along floors. Places which are not ventilated, e.g. unventilated below ground level areas such as trenches, conduits and shafts, are particularly prone to the presence of flammable substances or mixtures.



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Hazardous combustion products
Carbon monoxide (CO), Carbon dioxide (CO₂)

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Coordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel
Remove persons to safety.

For emergency responders
Wear breathing apparatus if exposed to vapors/dust/aerosols/gases.

6.2 Environmental precautions

6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill
Covering of drains

Advice on how to clean up a spill
Wipe up with absorbent material (e.g. cloth, fleece). Collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

Appropriate containment techniques
Use of adsorbent materials.

Other information relating to spills and releases
Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Recommendations

- Measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. Avoidance of ignition sources. Keep away from sources of ignition - No smoking. Take precautionary measures against static discharge. Use only in well-ventilated areas. Due to danger of explosion, prevent leakage of vapours into cellars, flues and ditches. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools.

- Specific notes/details

Places which are not ventilated, e.g. unventilated below ground level areas such as trenches, conduits and shafts, are particularly prone to the presence of flammable substances or mixtures. Vapors are heavier than air, spread along floors and form explosive mixtures with air. Vapors may form explosive mixtures with air.



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Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

Managing of associated risks

- Explosive atmospheres

Keep container tightly closed and in a well-ventilated place. Use local and general ventilation. Keep cool. Protect from sunlight.

- Flammability hazards

Keep away from sources of ignition - No smoking. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharge. Protect from sunlight.

- Ventilation requirements

Use local and general ventilation. Ground/bond container and receiving equipment.

- Packaging compatibilities

Only packagings which are approved (e.g. acc. to the Dangerous Goods Regulations) may be used.

7.3 Specific end use(s)

See section 16 for a general overview.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values (Workplace Exposure Limits)											
Country	Name of agent	CAS No	Identifier	TWA [ppm]	TWA [mg/m ³]	STEL [ppm]	STEL [mg/m ³]	Ceiling-C [ppm]	Ceiling-C [mg/m ³]	Notation	Source
US	tert-butyl acetate	540-88-5	PEL (CA)	200	950						Cal/OSHA PEL
US	tert-butyl acetate	540-88-5	REL	200 (10 h)	950 (10 h)						NIOSH REL
US	tert-butyl acetate	540-88-5	TLV®	50		150					ACGIH® 2019
US	tert-butyl acetate	540-88-5	PEL	200	950						29 CFR 1910.1000

Notation

Ceiling-C
STEL

ceiling value is a limit value above which exposure should not occur
short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified)

TWA

time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified)



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Relevant DNELs of components of the mixture

Name of substance	CAS No	End-point	Threshold level	Protection goal, route of exposure	Used in	Exposure time
tert-butyl acetate	540-88-5	DNEL	159 mg/m ³	human, inhalatory	worker (industry)	chronic - systemic effects
tert-butyl acetate	540-88-5	DNEL	714 mg/m ³	human, inhalatory	worker (industry)	acute - systemic effects
tert-butyl acetate	540-88-5	DNEL	22.5 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
parachlorobenzotrifluoride	98-56-6	DNEL	1.025 mg/m ³	human, inhalatory	worker (industry)	chronic - systemic effects
parachlorobenzotrifluoride	98-56-6	DNEL	0.4 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
parachlorobenzotrifluoride	98-56-6	DNEL	17.6 µg/cm ²	human, dermal	worker (industry)	acute - local effects

Relevant PNECs of components of the mixture

Name of substance	CAS No	End-point	Threshold level	Organism	Environmental compartment	Exposure time
tert-butyl acetate	540-88-5	PNEC	0.016 mg/l	aquatic organisms	freshwater	short-term (single instance)
tert-butyl acetate	540-88-5	PNEC	0.002 mg/l	aquatic organisms	marine water	short-term (single instance)
tert-butyl acetate	540-88-5	PNEC	0.15 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
tert-butyl acetate	540-88-5	PNEC	0.172 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
tert-butyl acetate	540-88-5	PNEC	0.017 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
tert-butyl acetate	540-88-5	PNEC	0.025 mg/kg	terrestrial organisms	soil	short-term (single instance)
parachlorobenzotrifluoride	98-56-6	PNEC	2 µg/l	aquatic organisms	freshwater	short-term (single instance)
parachlorobenzotrifluoride	98-56-6	PNEC	0.2 µg/l	aquatic organisms	marine water	short-term (single instance)
parachlorobenzotrifluoride	98-56-6	PNEC	0.032 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
parachlorobenzotrifluoride	98-56-6	PNEC	0.022 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
parachlorobenzotrifluoride	98-56-6	PNEC	0.002 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
parachlorobenzotrifluoride	98-56-6	PNEC	0.026 mg/kg	terrestrial organisms	soil	short-term (single instance)



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8.2 Exposure controls

Appropriate engineering controls

General ventilation.

Individual protection measures (personal protective equipment)

Eye/face protection

Wear eye/face protection.

Skin protection

- Hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leak-tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

- Other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

Environmental exposure controls

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state	liquid
Color	various
Odor	characteristic

Other safety parameters

pH (value)	not determined
Melting point/freezing point	not determined
Initial boiling point and boiling range	97.8 °C
Flash point	10 °C at 101.3 kPa
Evaporation rate	not determined
Flammability (solid, gas)	not relevant, (fluid)
Explosive limits	not determined
Vapor pressure	42 Torr at 20 °C
Density	1.198 g/cm ³ at 25 °C



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Vapor density	this information is not available
Solubility(ies)	not determined
Partition coefficient	
- n-octanol/water (log KOW)	this information is not available
Auto-ignition temperature	589 °C (auto-ignition temperature (liquids and gases))
Viscosity	not determined
Explosive properties	none
Oxidizing properties	none
Temperature class (USA, acc. to NEC 500)	T1 (maximum permissible surface temperature on the equipment: 450°C)

SECTION 10: Stability and reactivity

10.1 Reactivity

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials". The mixture contains reactive substance(s). Risk of ignition.

If heated:

Risk of ignition

10.2 Chemical stability

See below "Conditions to avoid".

10.3 Possibility of hazardous reactions

No known hazardous reactions.

10.4 Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Hints to prevent fire or explosion

Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools. Take precautionary measures against static discharge.

10.5 Incompatible materials

Oxidizers

10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.



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SECTION 11: Toxicological information

11.1 Information on toxicological effects

Test data are not available for the complete mixture.

Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

Acute toxicity

Harmful if swallowed.

GHS of the United Nations, annex 4:

- Acute toxicity estimate (ATE)

Oral 1,110 mg/kg

Acute toxicity estimate (ATE) of components of the mixture			
Name of substance	CAS No	Exposure route	ATE
ambient temperature curable refractory resin A	unknown	oral	500 mg/kg

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/eye irritation

Causes serious eye damage.

Respiratory or skin sensitization

May cause an allergic skin reaction.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

Carcinogenicity

Shall not be classified as carcinogenic.

Reproductive toxicity

Shall not be classified as a reproductive toxicant.

Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.



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SECTION 12: Ecological information

12.1 Toxicity

Toxic to aquatic life with long lasting effects.

Aquatic toxicity (acute) of components of the mixture					
Name of substance	CAS No	Endpoint	Value	Species	Exposure time
ambient temperature curable refractory resin A	unknown	LC50	57.1 mg/l	zebra fish (Danio rerio)	96 h
tert-butyl acetate	540-88-5	LC50	240 mg/l	fish	96 h
tert-butyl acetate	540-88-5	EC50	410 mg/l	aquatic invertebrates	24 h
tert-butyl acetate	540-88-5	ErC50	64 mg/l	algae	96 h
parachlorobenzotrifluoride	98-56-6	LC50	3 mg/l	fish	48 h
parachlorobenzotrifluoride	98-56-6	ErC50	>0.41 mg/l	algae	72 h
parachlorobenzotrifluoride	98-56-6	EC50	>0.41 mg/l	algae	72 h

Aquatic toxicity (chronic) of components of the mixture					
Name of substance	CAS No	Endpoint	Value	Species	Exposure time
tert-butyl acetate	540-88-5	EC50	410 mg/l	aquatic invertebrates	24 h
parachlorobenzotrifluoride	98-56-6	LC50	6.5 mg/l	fish	24 h
parachlorobenzotrifluoride	98-56-6	EC50	242.1 mg/l	microorganisms	30 min

12.2 Persistence and degradability

Data are not available.

12.3 Bioaccumulative potential

Data are not available.

12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment

Data are not available.



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12.6 Other adverse effects

Endocrine disrupting potential
None of the ingredients are listed.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste treatment-relevant information
Solvent reclamation/regeneration.

Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

Waste treatment of containers/packages

Only packagings which are approved (e.g. acc. to DOT) may be used. Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

Remarks

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

SECTION 14: Transport information

14.1	UN number	2924
14.2	UN proper shipping name	Flammable liquid, corrosive, n.o.s.
	Technical name (hazardous ingredients)	ambient temperature curable refractory resin A, tert-butyl acetate
14.3	Transport hazard class(es)	
	Class	3 (flammable liquids)
	Subsidiary risk(s)	8 (corrosive effects)
14.4	Packing group	II (substance presenting medium danger)
14.5	Environmental hazards	non-environmentally hazardous acc. to the dangerous goods regulations
14.6	Special precautions for user	
	There is no additional information.	
14.7	Transport in bulk according to Annex II of MARPOL and the IBC Code	
	The cargo is not intended to be carried in bulk.	

Information for each of the UN Model Regulations



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Transport of dangerous goods by road or rail (49 CFR US DOT)

Index number	2924
Proper shipping name	Flammable liquid, corrosive, n.o.s.
- Particulars in the shipper's declaration	UN2924, Flammable liquid, corrosive, n.o.s., (contains: ambient temperature curable refractory resin A, tert-butyl acetate), 3 (8), II
- Reportable quantity (RQ)	15,857 lbs (7,199 kg) (tert-butyl acetate)
Class	3
Subsidiary risk(s)	8
Packing group	II
Danger label(s)	3+8



Special provisions (SP)	IB2, T11, TP2, TP27
ERG No	132

International Maritime Dangerous Goods Code (IMDG)

UN number	2924
Proper shipping name	FLAMMABLE LIQUID, CORROSIVE, N.O.S.
Class	3
Subsidiary risk(s)	8
Marine pollutant	-
Packing group	II
Danger label(s)	3+8



Special provisions (SP)	274
Excepted quantities (EQ)	E2
Limited quantities (LQ)	1 L
EmS	F-E, S-C
Stowage category	B

International Civil Aviation Organization (ICAO-IATA/DGR)

UN number	2924
Proper shipping name	Flammable liquid, corrosive, n.o.s.
Class	3
Subsidiary risk(s)	8
Packing group	II
Danger label(s)	3+8



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Special provisions (SP)	A3
Excepted quantities (EQ)	E2
Limited quantities (LQ)	0,5 L

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

National regulations (United States)

Toxic Substance Control Act (TSCA) all ingredients are listed

Superfund Amendment and Reauthorization Act (SARA TITLE III)

- The List of Extremely Hazardous Substances and Their Threshold Planning Quantities (EPCRA Section 302, 304)

none of the ingredients are listed

- Specific Toxic Chemical Listings (EPCRA Section 313)

none of the ingredients are listed

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

- List of Hazardous Substances and Reportable Quantities (CERCLA section 102a) (40 CFR 302.4)

Name of substance	CAS No	Wt%	Remarks	Statutory code	Final RQ pounds (Kg)
tert-butyl acetate	540-88-5	31.53		1	5000 (2270)

Legend

1 "1" indicates that the statutory source is section 311(b)(2) of the Clean Water Act

Clean Air Act

none of the ingredients are listed

Right to Know Hazardous Substance List

- Cleaning Product Right to Know Act Substance List (CA-RTK)

Name of substance	CAS No	Functionality	Authoritative Lists
ambient temperature curable refractory resin A	unknown	refractory resin	
tert-butyl acetate	540-88-5	solvents	
parachlorobenzotrifluoride	98-56-6	solvents	
silicone based rheology modifier	unknown	viscosity modifier	

- Toxic or Hazardous Substance List (MA-TURA)

Name of substance	CAS No	DEP CODE	PBT / HHS / LHS	PBT / HHS Threshold	De Minimis Concentration Threshold
tert-butyl acetate	540-88-5				1.0 %



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- Hazardous Substances List (MN-ERTK)

Name of substance	CAS No	References	Remarks
tert-butyl acetate	540-88-5	A, O	

Legend

- A American Conference of Governmental Industrial Hygienists (ACGIH), "Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices for 1992-93", available from ACGIH
- O Occupational Safety and Health Administration (OSHA), Safety and Health Standards, Code of Federal Regulations, title 29, part 1910, subpart Z, "Toxic and Hazardous Substances, 1990." General information: Minnesota Department of Labor and Industry, Occupational Safety and Health Division

- Hazardous Substance List (NJ-RTK)

Name of substance	CAS No	Remarks	Classifications
tert-butyl acetate	540-88-5		F3

Legend

- F3 Flammable - Third Degree

- Hazardous Substance List (Chapter 323) (PA-RTK)

Name of substance	CAS No	Classification
tert-butyl acetate	540-88-5	E

Legend

- E Environmental hazard

- Hazardous Substance List (RI-RTK)

Name of substance	CAS No	References
tert-butyl acetate	540-88-5	T

Legend

- T Toxicity (ACGIH®)

California Environmental Protection Agency (Cal/EPA): Proposition 65 - Safe Drinking Water and Toxic Enforcement Act of 1987

Proposition 65 List of chemicals				
Name acc. to inventory	CAS No	Wt%	Remarks	Type of the toxicity
p-chloro- α,α,α -trifluorotoluene (para-Chlorobenzotrifluoride, PCBTF)	98-56-6	22.52		cancer

VOC content

Regulated Volatile Organic Compounds (VOC-EPA): 0 %
Regulated Volatile Organic Compounds (VOC-Cal ARB): 0 %

Industry or sector specific available guidance(s)

NPCA-HMIS® III

Hazardous Materials Identification System. American Coatings Association.



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Category	Rating	Description
Chronic	/	none
Health	3	major injury likely unless prompt action is taken and medical treatment is given
Flammability	3	material that can be ignited under almost all ambient temperature conditions
Physical hazard	0	material that is normally stable, even under fire conditions, and will not react with water, polymerize, decompose, condense, or self-react. Non-explosive
Personal protection	-	

Chronic: chronic hazard
Flammability: flammability hazard
Health: health hazard
Personal protection: personal protective equipment (PPE) for normal use
Physical hazard: reactivity

NFPA® 704

National Fire Protection Association: Standard System for the Identification of the Hazards of Materials for Emergency Response (United States).

Category	Degree of hazard	Description
Flammability	3	material that can be ignited under almost all ambient temperature conditions
Health	3	material that, under emergency conditions, can cause serious or permanent injury
Instability	0	material that is normally stable, even under fire conditions
Special hazard		

National inventories

Country	Inventory	Status
CA	DSL	not all ingredients are listed
EU	REACH Reg.	not all ingredients are listed
US	TSCA	all ingredients are listed

Legend

DSL Domestic Substances List (DSL)
REACH Reg. REACH registered substances
TSCA Toxic Substance Control Act

15.2 Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information, including date of preparation or last revision

Indication of changes (revised safety data sheet)



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Adam's Glass - Ceramic Coating System Part A

Version number: GHS 3.0
Replaces version of: 2019-09-16 (GHS 2)

Revision: 2019-12-05

Section	Former entry (text/value)	Actual entry (text/value)	Safety-relevant
3.2		Hazardous ingredients acc. to GHS: change in the listing (table)	yes
6.2	Environmental precautions: If substance has entered a water course or sewer, inform the responsible authority.	Environmental precautions	yes
11.1		Acute toxicity estimate (ATE) of components of the mixture: change in the listing (table)	yes
12.1		Aquatic toxicity (acute) of components of the mix- ture: change in the listing (table)	yes
14.2		Technical name (hazardous ingredients): ambient temperature curable refractory resin A, tert- butyl acetate	yes
14.5	Environmental hazards: hazardous to the aquatic environment	Environmental hazards: non-environmentally hazardous acc. to the danger- ous goods regulations	yes
14.5	Environmentally hazardous substance (aquatic en- vironment): parachlorobenzotrifluoride		yes
14.7	Particulars in the shipper's declaration: UN2924, Flammable liquid, corrosive, n.o.s., 3 (8), II, environmentally hazardous	Particulars in the shipper's declaration: UN2924, Flammable liquid, corrosive, n.o.s., (con- tains: ambient temperature curable refractory resin A, tert-butyl acetate), 3 (8), II	yes
14.7	Danger label(s): 3+8, fish and tree	Danger label(s): 3+8	yes
14.7		Danger label(s): change in the listing (table)	yes
14.7	Environmental hazards: yes (hazardous to the aquatic environment)		yes
14.7	Marine pollutant: yes (hazardous to the aquatic environment)	Marine pollutant: -	yes
14.7	Danger label(s): 3+8, fish and tree	Danger label(s): 3+8	yes
14.7		Danger label(s): change in the listing (table)	yes
14.7	Environmental hazards: yes (hazardous to the aquatic environment)		yes
15.1	New Jersey Worker and Community Right to Know Act		yes
15.1		Right to Know Hazardous Substance List: change in the listing (table)	yes
15.1		Right to Know Hazardous Substance List	yes
15.1		Cleaning Product Right to Know Act Substance List (CA-RTK)	yes



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Adam's Glass - Ceramic Coating System Part A

Version number: GHS 3.0
Replaces version of: 2019-09-16 (GHS 2)

Revision: 2019-12-05

Section	Former entry (text/value)	Actual entry (text/value)	Safety-relevant
15.1		Cleaning Product Right to Know Act Substance List (CA-RTK): change in the listing (table)	yes
15.1		Toxic or Hazardous Substance List (MA-TURA)	yes
15.1		Toxic or Hazardous Substance List (MA-TURA): change in the listing (table)	yes
15.1		Hazardous Substances List (MN-ERTK)	yes
15.1		Hazardous Substances List (MN-ERTK): change in the listing (table)	yes
15.1		Hazardous Substance List (NJ-RTK)	yes
15.1		Hazardous Substance List (NJ-RTK): change in the listing (table)	yes
15.1		Hazardous Substance List (Chapter 323) (PA-RTK)	yes
15.1		Hazardous Substance List (Chapter 323) (PA-RTK): change in the listing (table)	yes
15.1		Hazardous Substance List (RI-RTK)	yes
15.1		Hazardous Substance List (RI-RTK): change in the listing (table)	yes
15.1	California Environmental Protection Agency (Cal/EPA): Proposition 65 - Safe Drinking Water and Toxic Enforcement Act of 1987: none of the ingredients are listed	California Environmental Protection Agency (Cal/EPA): Proposition 65 - Safe Drinking Water and Toxic Enforcement Act of 1987	yes
15.1		Proposition 65 List of chemicals: change in the listing (table)	yes
16		Abbreviations and acronyms: change in the listing (table)	yes

Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
29 CFR 1910.1000	29 CFR 1910.1000, Tables Z-1, Z-2, Z-3 - Occupational Safety and Health Standards: Toxic and Hazardous Substances (permissible exposure limits)
49 CFR US DOT	49 CFR U.S. Department of Transportation
ACGIH®	American Conference of Governmental Industrial Hygienists
ACGIH® 2019	From ACGIH®, 2019 TLVs® and BEIs® Book. Copyright 2019. Reprinted with permission. Information on the proper use of the TLVs® and BEIs®: http://www.acgih.org/tlv-bei-guidelines/policies-procedures-presentations/tlv-bei-position-statement
Acute Tox.	Acute toxicity
ATE	Acute Toxicity Estimate
Cal/OSHA PEL	California Division of Occupational Safety and Health (Cal/OSHA): Permissible Exposure Limits (PELs)
Cal ARB	California Air Resources Board
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)



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Adam's Glass - Ceramic Coating System Part A

Version number: GHS 3.0
Replaces version of: 2019-09-16 (GHS 2)

Revision: 2019-12-05

Abbr.	Descriptions of used abbreviations
Ceiling-C	Ceiling value
DEP CODE	Department of Environmental Protection Code
DGR	Dangerous Goods Regulations (see IATA/DGR)
DNEL	Derived No-Effect Level
DOT	Department of Transportation (USA)
EC50	Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval
EmS	Emergency Schedule
EPA	Environmental Protection Agency. An agency of the federal government of the United States charged with protecting human health and the environment
ErC50	≡ EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control
ERG No	Emergency Response Guidebook - Number
Eye Dam.	Seriously damaging to the eye
Eye Irrit.	Irritant to the eye
Flam. Liq.	Flammable liquid
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
HHS	Higher hazard substance
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
LC50	Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval
LHS	Lower hazard substance
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
NIOSH REL	National Institute for Occupational Safety and Health (NIOSH): Recommended Exposure Limits (RELs)
NPCA-HMIS® III	National Paint and Coatings Association: Hazardous Materials Identification System - HMIS® III, Third Edition
OSHA	Occupational Safety and Health Administration (United States)
PBT	Persistent, Bioaccumulative and Toxic
PEL	Permissible exposure limit
PNEC	Predicted No-Effect Concentration
ppm	Parts per million
RTECS	Registry of Toxic Effects of Chemical Substances (database of NIOSH with toxicological information)
Skin Corr.	Corrosive to skin
Skin Irrit.	Irritant to skin



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Adam's Glass - Ceramic Coating System Part A

Version number: GHS 3.0
Replaces version of: 2019-09-16 (GHS 2)

Revision: 2019-12-05

Abbr.	Descriptions of used abbreviations
Skin Sens.	Skin sensitization
STEL	Short-term exposure limit
TLV®	Threshold Limit Values
TWA	Time-weighted average
VOC	Volatile Organic Compounds
vPvB	Very Persistent and very Bioaccumulative

Key literature references and sources for data

OSHA Hazard Communication Standard (HCS), 29 CFR 1910.1200.

Transport of dangerous goods by road or rail (49 CFR US DOT). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

Classification procedure

Physical and chemical properties: The classification is based on tested mixture.

Health hazards, Environmental hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

List of relevant phrases (code and full text as stated in chapter 2 and 3)

Code	Text
H225	Highly flammable liquid and vapor.
H226	Flammable liquid and vapor.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.

Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.