

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Revision date: 7/20/2022

SECTION 1: Identification

1.1. Identification

Product form Product name Product code : Mixture : Reno ASAP Gun 60 ABR

: 612000

1.2. Recommended use and restrictions on use

No additional information available

1.3. Supplier	
Reno Refractories, Inc. 601 Reno Drive P.O. Box 201 Morris, AL, 35116 United States T 205-647-0240 - F 205-647-6854 <u>sales@r-ref.com</u> - <u>www.renorefractories.com</u>	
1.4. Emergency telephone number	
Emergency number	: 1-800-262-8200 CHEMTREC

SECTION 2: Hazard(s) identification	on		
2.1. Classification of the substance of	· mixture		
GHS US classification			
Carcinogenicity Category 1A Specific target organ toxicity (repeated expose	ure) Category 1	H350 H372	May cause cancer Causes damage to organs through prolonged or repeated exposure
Full text of H statements : see section 16			
2.2. GHS Label elements, including pr	ecautionary statem	ents	
GHS US labeling Hazard pictograms (GHS US)		•	
Signal word (GHS US)	: Danger		
Hazard statements (GHS US)	: H350 - May c H372 - Cause		organs through prolonged or repeated exposure
Precautionary statements (GHS US)	P202 - Do no P260 - Do no P264 - Wash P270 - Do no P280 - Wear P308+P313 - P314 - Get m P501 - Dispo	t handle until a t breathe dust/ hands, forearr t eat, drink or s protective glow If exposed or edical advice/a se of contents/	ctions before use. Ill safety precautions have been read and understood. fume/gas/mist/vapors/spray. ms and face thoroughly after handling. smoke when using this product. res/protective clothing/eye protection/face protection. concerned: Get medical advice/attention. attention if you feel unwell. container to hazardous or special waste collection point, in inal, national and/or international regulation.

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2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures			
Name	Product identifier	%	GHS US classification
Crystalline silica	CAS-No.: 14808-60-7	≤ 5.3	Carc. 1A, H350 STOT RE 1, H372
Silicon carbide	CAS-No.: 409-21-2	1.76 – 3.92	Carc. 1B, H350
Titanium dioxide	CAS-No.: 13463-67-7	0.01 – 0.15	Carc. 2, H351
Full text of bazard classes and H-statements : see section 16			

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures 4.1. Description of first aid measures First-aid measures general : IF exposed or concerned: Get medical advice/attention. First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. First-aid measures after skin contact Wash skin with plenty of water. : First-aid measures after eye contact Rinse eyes with water as a precaution. : First-aid measures after ingestion Call a poison center/doctor/physician if you feel unwell. : 4.2. Most important symptoms and effects (acute and delayed)

No additional information available

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media		
Suitable extinguishing media	: Water spray. Dry powder. Foam.	
5.2. Specific hazards arising from the chemical		
Hazardous decomposition products in case of fire	: Toxic fumes may be released.	
5.3. Special protective equipment and precautions for fire-fighters		
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.	

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SECTION 6: Accidental release measures		
6.1. Personal precautions, protective equipment and emergency procedures		
6.1.1. For non-emergency personnel		
Emergency procedures	: Only qualified personnel equipped with suitable protective equipment may intervene. Do not breathe dust/fume/gas/mist/vapors/spray.	
6.1.2. For emergency responders		
Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".	
6.2. Environmental precautions		
Avoid release to the environment. Notify authorities if product enters sewers or public waters.		
6.3. Methods and material for containment and cleaning up		
Methods for cleaning up	: Mechanically recover the product. Notify authorities if product enters sewers or public waters.	

Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

Other information

SECTION 7: Handling and stora	age	
7.1. Precautions for safe handling		
Precautions for safe handling Hygiene measures	 Ensure good ventilation of the work station. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Take all necessary technical measures to avoid or minimize the release of the product on the workplace. Limit quantities of product at the minimum necessary for handling and limit the number of exposed workers. Provide local exhaust or general room ventilation. Wear personal protective equipment. Floors, walls and other surfaces in the hazard area must be cleaned regularly. Do not breathe dust/fume/gas/mist/vapors/spray. Separate working clothes from town clothes. Launder separately. Do not eat, drink or smoke when using this product. Always wash hands after handling the product. 	
7.2. Conditions for safe storage, including any incompatibilities		
Storage conditions	: Store in a well-ventilated place. Keep cool.	

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Reno ASAP Gun 60 ABR		
No additional information available		
Titanium dioxide (13463-67-7)		
USA - ACGIH - Occupational Exposure Limits		
Local name	Titanium dioxide	
ACGIH OEL TWA	10 mg/m ³	
Remark (ACGIH)	TLV® Basis: LRT irr; pneumoconiosis. Notations: A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans)	

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Titanium dioxide (13463-67-7)		
Regulatory reference	ACGIH 2022	
USA - OSHA - Occupational Exposure Limits		
Local name	Titanium dioxide (Total dust)	
OSHA PEL (TWA) [1]	15 mg/m ³	
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1	
Crystalline silica (14808-60-7)		
USA - ACGIH - Occupational Exposure Lir	nits	
Local name	Silica crystaline - quartz	
ACGIH OEL TWA	0.025 mg/m ³ (Respirable fraction)	
Remark (ACGIH)	TLV® Basis: Pulm fibrosis; lung cancer. Notations: A2 (Suspected Human Carcinogen)	
Regulatory reference	ACGIH 2022	
USA - OSHA - Occupational Exposure Limits		
Local name	Quartz (Respirable) (Silica: Crystalline)	
Remark (OSHA)	Table Z-3. For OSHA PEL (TWA): Use formulas: (250 / (%SiO2+5)) for mppcf and (10 mg/m3 (%SiO2+2)) for mg/m3. CAS No. source: eCFR Table Z-1.	
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-3 Mineral Dusts	
Silicon carbide (409-21-2)		
USA - ACGIH - Occupational Exposure Lir	nits	
Local name	Silicon carbide	
ACGIH OEL TWA	 3 mg/m³ (Respirable fraction. The value is for particulate matter containing no asbestos and < 1% crystalline silica) 0.1 fibers/cm³ (Respirable fibers: length > 5 μm; aspect ratio ≥ 3:1, as determined by the membrane filter method at 400-450X magnification (4-mm objective), using phase-contrast illumination) 10 mg/m³ (Inhalable fraction. The value is for particulate matter containing no asbestos and < 1% crystalline silica) 	
Remark (ACGIH)	Non fibrous = TLV® Basis: URT irr Fibrous (including whiskers) = TLV® Basis: Mesothelioma; cancer. Notations: A2 (Suspected Human Carcinogen)	
Regulatory reference	ACGIH 2022	
USA - OSHA - Occupational Exposure Lim	nits	
Local name	Silicon carbide	
OSHA PEL (TWA) [1]	15 mg/m³ (Total dust) 5 mg/m³ (Respirable fraction)	
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1	
8.2. Appropriate engineering controls		
Appropriate engineering controls	: Ensure good ventilation of the work station.	

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8.3. Individual protection measures/Personal protective equipment
Hand protection:
Protective gloves
Eye protection:
Safety glasses
Skin and body protection:
Wear suitable protective clothing
Respiratory protection:
Wear respiratory protection.

Personal protective equipment symbol(s):



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Granular powder.
Color	: Gray
Odor	: Almost odorless
Odor threshold	: No data available
рН	: No data available
Melting point	: No data available
Freezing point	: Not applicable
Boiling point	: No data available
Flash point	: Not applicable
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Non flammable.
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: Not applicable
Decomposition temperature	: No data available
Viscosity, kinematic	: Not applicable
Viscosity, dynamic	: No data available
Explosion limits	: Not applicable
Explosive properties	: No data available
Oxidizing properties	: No data available

9.2. Other information

No additional information available

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SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

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

SECTION 11: Toxicological information

11.1. Information on toxicological effects		
Acute toxicity (dermal)	Not classified Not classified Not classified	
Titanium dioxide (13463-67-7)		
LD50 oral rat	> 2000 mg/kg body weight (OECD 401: Acute Oral Toxicity, Rat, Male / female, Experimental value, Oral, 14 day(s))	
LC50 Inhalation - Rat	> 5.09 mg/l (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male, Experimental value, Inhalation (dust), 14 day(s))	
Silicon carbide (409-21-2)		
LD50 oral rat	> 2000 mg/kg body weight (OECD 423: Acute Oral Toxicity – Acute Toxic Class Method, Rat, Female, Experimental value, Oral, 14 day(s))	
LD50 dermal rat	> 2000 mg/kg body weight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal)	
Skin corrosion/irritation :	Not classified	
Titanium dioxide (13463-67-7)		
рН	7 (aqueous suspension, 10 %)	
Crystalline silica (14808-60-7)		
рН	6 - 7	
Silicon carbide (409-21-2)		
рН	Not applicable (non-soluble in water), CIPAC MT 75: Determination of pH	
Serious eye damage/irritation	Not classified	

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Titanium dioxide (13463-67-7)		
рН	7 (aqueous suspension, 10 %)	
Crystalline silica (14808-60-7)		
рН	6 – 7	
Silicon carbide (409-21-2)		
рН	Not applicable (non-soluble in water), CIPAC MT 75: Determination of pH	
Germ cell mutagenicity :	Not classified Not classified May cause cancer.	
Titanium dioxide (13463-67-7)		
IARC group	2B - Possibly carcinogenic to humans	
Crystalline silica (14808-60-7)		
IARC group	1 - Carcinogenic to humans	
Silicon carbide (409-21-2)		
IARC group	2A - Probably carcinogenic to humans	
STOT-single exposure :	Not classified Not classified Causes damage to organs through prolonged or repeated exposure.	
Crystalline silica (14808-60-7)		
STOT-repeated exposure	Causes damage to organs through prolonged or repeated exposure.	
	Not classified Not applicable	
Titanium dioxide (13463-67-7)		
Viscosity, kinematic	Not applicable	
Crystalline silica (14808-60-7)		
Viscosity, kinematic	Not applicable (solid)	
Silicon carbide (409-21-2)		
Viscosity, kinematic	Not applicable (solid)	

SECTION 12: Ecological information	
12.1. Toxicity	
Ecology - general	: The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.
Titanium dioxide (13463-67-7)	
LC50 - Fish [1]	> 100 mg/l (Equivalent or similar to OECD 203, 96 h, Oncorhynchus mykiss, Static system, Fresh water, Experimental value, Nominal concentration)
ErC50 algae	61 mg/l (EPA 600/9-78-018, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, Nominal concentration)

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Silicon carbide (409-21-2)			
ErC50 algae	> 100 mg/l (OECD 201: Alga, Growth Inhibition Test, 48 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, GLP)		
12.2. Persistence and degradability			
Titanium dioxide (13463-67-7)			
Persistence and degradability	Biodegradability: not applicable.		
Chemical oxygen demand (COD)	Not applicable (inorganic)		
ThOD	Not applicable (inorganic)		
Crystalline silica (14808-60-7)			
Persistence and degradability	Biodegradability: not applicable.		
Chemical oxygen demand (COD)	Not applicable (inorganic)		
ThOD	Not applicable (inorganic)		
Silicon carbide (409-21-2)			
Persistence and degradability	Biodegradability: not applicable.		
Chemical oxygen demand (COD)	Not applicable (inorganic)		
ThOD	Not applicable (inorganic)		
12.3. Bioaccumulative potential			
Titanium dioxide (13463-67-7)			
Bioaccumulative potential	Not bioaccumulative.		
Crystalline silica (14808-60-7)			
Bioaccumulative potential	Bioaccumulation: not applicable.		
Silicon carbide (409-21-2)			
Bioaccumulative potential	Not bioaccumulative.		
12.4. Mobility in soil			
Titanium dioxide (13463-67-7)			
Surface tension	No data available in the literature		
Ecology - soil	Low potential for mobility in soil.		
Crystalline silica (14808-60-7)			
Ecology - soil	No (test)data on mobility of the substance available.		
Silicon carbide (409-21-2)			
Surface tension	No data available in the literature		
Ecology - soil	Low potential for adsorption in soil.		
12.5. Other adverse effects	12.5. Other adverse effects		

No additional information available

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SECTION 13: Disposal considerations	
13.1. Disposal methods	
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
SECTION 14: Transport information	
In accordance with DOT / TDG / IMDG / IATA	
14.1. UN number	
Not regulated for transport	
14.2. UN proper shipping name	
Proper Shipping Name (DOT) Proper Shipping Name (TDG) Proper Shipping Name (IMDG) Proper Shipping Name (IATA)	 Not applicable Not applicable Not applicable Not applicable
14.3. Transport hazard class(es)	
DOT Transport hazard class(es) (DOT)	: Not applicable
TDG Transport hazard class(es) (TDG)	: Not applicable
IMDG Transport hazard class(es) (IMDG)	: Not applicable
IATA Transport hazard class(es) (IATA)	: Not applicable
14.4. Packing group	
Packing group (DOT) Packing group (TDG) Packing group (IMDG) Packing group (IATA)	 Not applicable Not applicable Not applicable Not applicable
14.5. Environmental hazards	
Other information	: No supplementary information available.
14.6. Special precautions for user	
DOT No data available	
TDG No data available	
IMDG No data available	

IATA No data available

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14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

15.2. International regulations

CANADA

Titanium dioxide (13463-67-7)

Listed on the Canadian DSL (Domestic Substances List)

Crystalline silica (14808-60-7)

Listed on the Canadian DSL (Domestic Substances List)

Silicon carbide (409-21-2)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

Titanium dioxide (13463-67-7)

Listed on IARC (International Agency for Research on Cancer)

Crystalline silica (14808-60-7)

Listed on IARC (International Agency for Research on Cancer)

Silicon carbide (409-21-2)

Listed on IARC (International Agency for Research on Cancer)

15.3. US State regulations

Component	State or local regulations
Titanium dioxide(13463-67-7)	U.S Massachusetts - Right To Know List; U.S New Jersey - Right to Know Hazardous Substance List; U.S Pennsylvania - RTK (Right to Know) List
Crystalline silica(14808-60-7)	U.S Massachusetts - Right To Know List; U.S New Jersey - Right to Know Hazardous Substance List; U.S Pennsylvania - RTK (Right to Know) List
Silicon carbide(409-21-2)	U.S Massachusetts - Right To Know List; U.S New Jersey - Right to Know Hazardous Substance List; U.S Pennsylvania - RTK (Right to Know) List

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SECTION 16: Other information

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Full text of H-phrases	
H350	May cause cancer
H351	Suspected of causing cancer
H372	Causes damage to organs through prolonged or repeated exposure

Safety Data Sheet (SDS), USA

The information provided in the Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of it's publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release. Reno Refractories, Inc. makes no warranties, expressed or implied, with respect to such information, including, but not limited to, any implied warranty of merchantability or fitness for a particular purpose or course of performance or usage of trade. User is responsible for determining whether the product is fit for a particular purpose and suitable for user's method of use or application. 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.