SAFETY DATA SHEET
WD BRIGHT SILVER

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name	WD BRIGHT SILVER
Product No.	WBS500, ADP008

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

1.3. Details of the supplier of the safety data sheet

Supplier	TETROSYL LIMITED BEVIS GREEN WORKS WALMERSLEY BURY BL9 6RE 0161 764 5981 0161 797 5899 info@tetrosyl.com
Manufacturer	TETROSYL LIMITED BEVIS GREEN WORKS WALMERSLEY BURY BL9 6RE 0161 764 5981 0161 797 5899 info@tetrosyl.com

1.4. Emergency telephone number

0161 764 5981

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical and Chemical Hazards	Flam. Aerosol 1 - H222
Human health	EUH066;Eye Dam. 1 - H318;STOT SE 3 - H336
Environment	Not classified.

Classification (1999/45/EEC) Xi;R36. F+;R12. R66, R67.

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

2.2. Label elements

Label In Accordance With (EC) No. 1272/2008

WD BRIGHT SILVER

Signal Word	Danger	
Hazard Statements		
	H222	Extremely flammable aerosol.
	H318	Causes serious eye damage.
	H336	May cause drowsiness or dizziness.
Precautionary Statements		
	P101	If medical advice is needed, have product container or label at hand.
	P102	Keep out of reach of children.
	P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
	P211	Do not spray on an open flame or other ignition source.
	P251	Pressurized container: Do not pierce or burn, even after use.
	P271	Use only outdoors or in a well-ventilated area.
	P261	Avoid breathing vapour/spray.
	P280	Wear eye and face protection.
	P305+351+338	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 or doctor/physician.
	P403+233	Store in a well-ventilated place. Keep container tightly closed.
	P405	Store locked up.
	P410+412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122°F.
	P501	Dispose of contents/container in accordance with local regulations.
Supplementary Precautionary Statements		
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	P304+340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
	P312	Call a POISON CENTER or doctor/physician if you feel unwell.
Supplemental label information		
	EUH066	Repeated exposure may cause skin dryness or cracking.

2.3. Other hazards

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

2-METHOXY-1-METHYLETHYL ACETATE	1.0 - <3.0%
CAS-No.: 108-65-6 EC No.: 203-603-9	

Classification (EC 1272/2008)	Classification (67/548/EEC)
Flam. Liq. 3 - H226	R10

ACETONE		25.0 - <50.0%
CAS-No.: 67-64-1	EC No.: 200-662-2	

Classification (EC 1272/2008)	Classification (67/548/EEC)
Flam. Liq. 2 - H225	F;R11
EUH066	Xi;R36
Eye Irrit. 2 - H319	R66
STOT SE 3 - H336	R67

ALUMINIUM POWDER (PYROPHORIC)		1.0 - <3.0%
CAS-No.: 7429-90-5	EC No.: 231-072-3	

Classification (EC 1272/2008)	Classification (67/548/EEC)
Pyr. Sol. 1 - H250	F;R15,R17
Water-react. 2 - H261	

BUTYL ACETATE -norm		10.0 - <20.0%
CAS-No.: 123-86-4	EC No.: 204-658-1	

Classification (EC 1272/2008)	Classification (67/548/EEC)
Flam. Liq. 3 - H226	R10
EUH066	R66
STOT SE 3 - H336	R67

ETHYLBENZENE		0.3 - <0.5%
CAS-No.: 100-41-4	EC No.: 202-849-4	

Classification (EC 1272/2008)	Classification (67/548/EEC)
Flam. Liq. 2 - H225	F;R11
Acute Tox. 4 - H332	Xn;R20

IPA		0.5 - < 1.0%
CAS-No.: 67-63-0	EC No.: 200-661-7	Registration Number: 01-2119457558-25-XXXX

Classification (EC 1272/2008)	Classification (67/548/EEC)
Flam. Liq. 2 - H225	F;R11
Eye Irrit. 2 - H319	Xi;R36
STOT SE 3 - H336	R67

ISO-BUTANOL		3.0 - <5.0%
CAS-No.: 78-83-1	EC No.: 201-148-0	Registration Number: 01-2119484609-23-XXXX

Classification (EC 1272/2008)	Classification (67/548/EEC)
Flam. Liq. 3 - H226	R10
Skin Irrit. 2 - H315	Xi;R37/38,R41
Eye Dam. 1 - H318	R67
STOT SE 3 - H335	
STOT SE 3 - H336	

PETROLEUM DISTILLATES (AROMATIC HYDROCARBON SOLVENT 160-180)		0.3 - <0.5%
CAS-No.: 64742-95-6	EC No.: 265-199-0	

Classification (EC 1272/2008)	Classification (67/548/EEC)
Not classified.	Xn;R65.
	Xi;R37.
	N;R51/53.
	R10.

PETROLEUM GASES, LIQUEFIED		20.0 - <25.0%
CAS-No.: 68476-85-7	EC No.: 270-704-2	

Classification (EC 1272/2008)	Classification (67/548/EEC)
Flam. Gas 1 - H220	F+;R12.
Press. Gas - H280	

Solvent Naptha		0.3 - <0.5%
CAS-No.:	EC No.: 919-446-0	Registration Number: 01-2119458049-33-0000

Classification (EC 1272/2008)	Classification (67/548/EEC)
Flam. Liq. 3 - H226	Xn;R65.
EUH066	N;R51/53.
STOT SE 3 - H336	R10,R66,R67.
Asp. Tox. 1 - H304	
Aquatic Chronic 2 - H411	

XYLENE		3.0 - <5.0%
CAS-No.: 1330-20-7	EC No.: 215-535-7	

Classification (EC 1272/2008)	Classification (67/548/EEC)
Flam. Liq. 3 - H226	R10
Acute Tox. 4 - H312	Xn;R20/21
Acute Tox. 4 - H332	Xi;R38
Skin Irrit. 2 - H315	

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General information
Get medical attention if any discomfort continues. Remove affected person from source of contamination. General first aid, rest, warmth and fresh air. NOTE! Effects may be delayed. Keep affected person under observation.
Inhalation
Remove victim immediately from source of exposure. In case of inhalation of spray mist: Move person into fresh air and keep at rest. Move injured person into fresh air and keep person calm under observation. If necessary, seek hospital and bring these instructions. Be aware that symptoms of lung oedema (shortness of breath) may develop up to 24 hours after exposure. Immediately call an ambulance.
Ingestion
Immediately rinse mouth and drink plenty of water. Keep person under observation. If person becomes uncomfortable take to hospital along with these instructions. Provide rest, warmth and fresh air. Do not induce vomiting. If vomiting occurs, the head should be kept low so that stomach vomit doesn't enter the lungs.
Skin contact
Wash skin thoroughly with soap and water. Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if any discomfort continues.
Eye contact
Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes wide apart. Do not rub eye. Get medical attention promptly if symptoms occur after washing.

4.2. Most important symptoms and effects, both acute and delayed

General information
The severity of the symptoms described will vary dependant of the concentration and the length of exposure. NOTE! Effects may be delayed. Keep affected person under observation.
Inhalation
May cause an asthma-like shortness of breath. In case of overexposure, organic solvents may depress the central nervous system causing dizziness and intoxication, and at very high concentrations unconsciousness and death. Drowsiness, dizziness, disorientation, vertigo. Vapours may cause drowsiness and dizziness. In high concentrations, vapours are anaesthetic and may cause headache, fatigue, dizziness and central nervous system effects.
Ingestion
May cause discomfort if swallowed. May cause stomach pain or vomiting. May cause nausea, headache, dizziness and intoxication. Due to the physical nature of this material it is unlikely that swallowing will occur.
Skin contact
Prolonged contact may cause redness, irritation and dry skin. May cause skin irritation/eczema.
Eye contact
Extreme irritation of eyes and mucous membranes, including burning and tearing. Vapour, spray or dust may cause chronic eye irritation or eye damage. May cause blurred vision and serious eye damage.

4.3. Indication of any immediate medical attention and special treatment needed

No recommendation given, but first aid may still be required in case of accidental exposure, inhalation or ingestion of this chemical. If in doubt, GET MEDICAL ATTENTION PROMPTLY!

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media
Use: Foam, carbon dioxide or dry powder. Water spray. Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing media
Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products
In case of fire, toxic gases (CO, CO2, NOx) may be formed.
Unusual Fire & Explosion Hazards
Extremely flammable. Severe explosion hazard when vapours are exposed to flames. Risk of explosion if heated. Vapours are heavier than air and may spread near ground to sources of ignition. May travel considerable distance to source of ignition and flash back. Heat may cause the containers to explode. Aerosol cans may explode in a fire.
Specific hazards
Aerosol containers can explode when heated, due to excessive pressure build-up. Vapours may be ignited by a spark, a hot surface or an ember. Vapours may form explosive air mixtures even at room temperature.

5.3. Advice for firefighters

Special Fire Fighting Procedures
Be aware of risk of fire re-starting, and risk of explosion. Cool containers exposed to flames with water until well after the fire is out. Use water to keep fire exposed containers cool and disperse vapours.
Protective equipment for fire-fighters
Self contained breathing apparatus and full protective clothing must be worn in case of fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Wear protective clothing as described in Section 8 of this safety data sheet. Avoid inhalation of vapours and aerosol spray. In case of spills, beware of slippery floors and surfaces.

6.2. Environmental precautions

Avoid discharge into drains, water courses or onto the ground. The product should not be dumped in nature but collected and delivered according to agreement with the local authorities.

6.3. Methods and material for containment and cleaning up

For waste disposal, see section 13. If leakage cannot be stopped, evacuate area. Stop leak if possible without risk. Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Remove sources of ignition. Collect with absorbent, non-combustible material into suitable containers.

6.4. Reference to other sections

Wear protective clothing as described in Section 8 of this safety data sheet. For waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Read and follow manufacturer's recommendations. Eliminate all sources of ignition. Wear full protective clothing for prolonged exposure and/or high concentrations. Good personal hygiene is necessary. Wash hands and contaminated areas with water and soap before leaving the work site. Do not eat, drink or smoke when using the product. Avoid inhalation of vapours/spray and contact with skin and eyes. Ventilate well, avoid breathing vapours. Use approved respirator if air contamination is above accepted level. Do not use in confined spaces without adequate ventilation and/or respirator. Mechanical ventilation or local exhaust ventilation may be required. Observe occupational exposure limits and minimise the risk of inhalation of vapours and mist.

7.2. Conditions for safe storage, including any incompatibilities

Keep away from heat, sparks and open flame. Keep upright. Protect against physical damage and/or friction. Aerosol cans: Must not be exposed to direct sunlight or temperatures above 50°C. Do not store for long periods or in large quantities. Store in a cool and well-ventilated place. Store in a dry place. Do not store near heat sources or expose to high temperatures.

7.3. Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Name	STD	TWA - 8 Hrs		STEL - 15 Min		Notes
2-METHOXY-1-METHYLETHYL ACETATE	WEL	50 ppm(Sk)	274 mg/m3(Sk)	100 ppm(Sk)	548 mg/m3(Sk)	
ACETONE	WEL	500 ppm	1210 mg/m3	1500 ppm	3620 mg/m3	
ALUMINIUM POWDER (PYROPHORIC)	WEL		4 mg/m3			
BUTYL ACETATE -norm	WEL	150 ppm	724 mg/m3	200 ppm	966 mg/m3	
ETHYLBENZENE	WEL	100 ppm	441 mg/m3	125 ppm	552 mg/m3	Sk
IPA	WEL	400 ppm	999 mg/m3	500 ppm	1250 mg/m3	
ISO-BUTANOL	WEL	50 ppm	154 mg/m3	75 ppm	231 mg/m3	
PETROLEUM GASES, LIQUEFIED	WEL	1000 ppm	1750 mg/m3	1250 ppm	2180 mg/m3	Carc
XYLENE	WEL	50 ppm	220 mg/m3	100 ppm	441 mg/m3	Sk

WEL = Workplace Exposure Limit.
Sk = Can be absorbed through skin.
Carc = Capable of causing cancer and/or heritable genetic damage.

8.2. Exposure controls

Protective equipment

Engineering measures
Provide adequate ventilation. Observe occupational exposure limits and minimize the risk of inhalation of spray.
Provide explosion proof ventilation for high concentrations.
Respiratory equipment
In case of inadequate ventilation use suitable respirator.
Hand protection
Use suitable protective gloves if risk of skin contact.
Eye protection
Wear approved, tight fitting safety glasses where splashing is probable. Wear approved safety goggles.
Other Protection
Provide eyewash station. Wear appropriate clothing to prevent repeated or prolonged skin contact.

Hygiene measures
Wash contaminated clothing before reuse. Wash hands at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. Wash promptly with soap & water if skin becomes contaminated. DO NOT SMOKE IN WORK AREA! When using do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Aerosol.
Colour	Silver.
Odour	Solvent.
Solubility	Insoluble in water

Initial boiling point and boiling range (°C)
Technically not feasible.
Melting point (°C)
Not determined.

Relative density	0.85-0.96 g/cm³

Vapour density (air=1)
Not determined.
Vapour pressure
Not determined.
Evaporation rate
Not determined.

Viscosity	12-14 s 20°C

Decomposition temperature (°C)
Not determined.
Odour Threshold, Lower
Not determined.
Odour Threshold, Upper
Not determined.

Flash point (°C)	-17

Auto Ignition Temperature (°C)
Not determined.
Flammability Limit - Lower(%)
Not determined.
Flammability Limit - Upper(%)
Not determined.
Partition Coefficient
(N-Octanol/Water)
Not determined.
Oxidising properties
Not available.

9.2. Other information

None.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No specific reactivity hazards associated with this product. The product may form explosive vapours/air mixtures even at normal room temperatures.

10.2. Chemical stability

Stable under normal temperature conditions and recommended use.

10.3. Possibility of hazardous reactions

Not relevant

10.4. Conditions to avoid

Avoid heat, flames and other sources of ignition. Avoid exposure to high temperatures or direct sunlight.

10.5. Incompatible materials

Materials To Avoid
No incompatible groups noted.

10.6. Hazardous decomposition products

None under normal conditions.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Toxic Dose 1 - LD 50
5800 mg/kg (oral rat)

Acute toxicity:
Acetone

Acute Toxicity (Dermal LD50)
> 7400 mg/kg Rat

Carcinogenicity:
Does not contain any substances known to be carcinogenic.

Reproductive Toxicity:
No evidence of reproductive toxicity in animal studies

Target Organs
Central nervous system
Central nervous system depression including narcotic effects such as drowsiness, narcosis, reduced alertness, loss of reflexes, lack of coordination and vertigo.

Specific target organ toxicity - repeated exposure:
STOT - Repeated exposure
NOAEL 900 mg/kg Oral Rat

Target Organs
Skin
Morphological changes that are potentially reversible but provide clear evidence of marked organ dysfunction.

Aspiration hazard:

Not relevant, due to the form of the product.

General information
Prolonged and repeated contact with solvents over a long period may lead to permanent health problems.

Inhalation
Gas or vapour is harmful on prolonged exposure or in high concentrations.

Ingestion
No harmful effects expected in amounts likely to be ingested by accident.

Skin contact
Repeated exposure may cause skin dryness or cracking.

Eye contact
Spray and vapour in the eyes may cause irritation and smarting.

Health Warnings
This chemical can be hazardous when inhaled and/or touched. This chemical may cause skin/eye irritation and burns (corrosive). May cause severe internal injury. Vapour from this chemical can be hazardous when inhaled.

Route of entry
Inhalation. Ingestion. Skin and/or eye contact. Skin absorption.

Target Organs
Central nervous system Eyes Skin

Medical Symptoms
Skin irritation. Irritation of eyes and mucous membranes. Central nervous system depression. Drowsiness, dizziness, disorientation, vertigo.
Medical Considerations
Skin disorders and allergies. Pre-existing eye problems.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity
The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

12.1. Toxicity

Acute Toxicity - Fish
LC50 96 hours 5540 mg/l Onchorhynchus mykiss (Rainbow trout)
Acetone
EC 50, 48 Hrs, Daphnia, mg/l 8800
Acute Toxicity - Aquatic Invertebrates
Not available.

12.2. Persistence and degradability

Degradability
The product is easily biodegradable.
Phototransformation
Degradation (90%) 28 days

12.3. Bioaccumulative potential

Bioaccumulative potential
The product does not contain any substances expected to be bioaccumulating.
Bioaccumulation factor
BCF 3
Partition coefficient
Not determined.

12.4. Mobility in soil

Mobility:
The product is soluble in water.

Adsorption/Desorption Coefficient
Not available.

12.5. Results of PBT and vPvB assessment

Not Classified as PBT/vPvB by current EU criteria.

12.6. Other adverse effects

Not available.

SECTION 13: DISPOSAL CONSIDERATIONS

General information
Waste is classified as hazardous waste. Disposal to licensed waste disposal site in accordance with the local Waste Disposal Authority. Do not puncture or incinerate even when empty.

13.1. Waste treatment methods

Dispose of waste and residues in accordance with local authority requirements. Confirm disposal procedures with environmental engineer and local regulations.

SECTION 14: TRANSPORT INFORMATION

14.1. UN number

UN No. (ADR/RID/ADN)	1950
UN No. (IMDG)	1950
UN No. (ICAO)	1950

14.2. UN proper shipping name

Proper Shipping Name	AEROSOLS

14.3. Transport hazard class(es)

ADR/RID/ADN Class	2
ADR/RID/ADN Class	Class 2: Gases
ADR Label No.	2.1
IMDG Class	2.1
ICAO Class/Division	2.1

Transport Labels

14.4. Packing group

ADR/RID/ADN Packing group	N/A
IMDG Packing group	N/A
ICAO Packing group	N/A

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant
No.

14.6. Special precautions for user

EMS F-D, S-U

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

SECTION 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU Legislation
Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments.

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

Revision Comments
NOTE: Lines within the margin indicate significant changes from the previous revision.

Revision Date	08/01/2015
Revision	22
Supersedes date	15/07/2014 v21
Safety Data Sheet Status	Approved.

Risk Phrases In Full

R15	Contact with water liberates extremely flammable gases.
R12	Extremely flammable.
R10	Flammable
R20/21	Harmful by inhalation and in contact with skin.
R20	Harmful by inhalation.
R65	Harmful: may cause lung damage if swallowed.
R11	Highly flammable
R36	Irritating to eyes.
R37/38	Irritating to respiratory system and skin.
R37	Irritating to respiratory system.
R38	Irritating to skin.
R66	Repeated exposure may cause skin dryness or cracking.
R41	Risk of serious damage to eyes.
R17	Spontaneously flammable in air.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R67	Vapours may cause drowsiness and dizziness.

WD BRIGHT SILVER

Hazard Statements In Full

H250	Catches fire spontaneously if exposed to air.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H280	Contains gas under pressure; may explode if heated.
H222	Extremely flammable aerosol.
H220	Extremely flammable gas.
H226	Flammable liquid and vapour.
H332	Harmful if inhaled.
H312	Harmful in contact with skin.
H225	Highly flammable liquid and vapour.
H261	In contact with water releases flammable gases.
H304	May be fatal if swallowed and enters airways.
H336	May cause drowsiness or dizziness.
H335	May cause respiratory irritation.
EUH066	Repeated exposure may cause skin dryness or cracking.
H411	Toxic to aquatic life with long lasting effects.