

SAFETY DATA SHEET

Power Up ThixoSYN2 Industrial Grease

Section 1. Identification

Product name	: Power Up ThixoSYN 2 Industrial Grease	
Product code	: 3420-400-10, 3420-400-30, 3420-400-60, 3420-17-1, 3420-55-1, 3420-180-1	
Other means of identification	: ThixoSYN	
Product type	: Semi-solid./ Grease.	
<u>Relevant identified uses of the substance or mixture and uses advised against</u>		
Identified uses	: General Aircraft Lubricant	
Supplier's details	: Awsum Outcomes Inc. Bay 5, 409 38th Avenue NE Calgary Alberta Canada T2E 6R9 Tel: 1 587-353-2000 Toll Free: 1-844-512-4093 Email: sales@wvi.global Web: www.awsumoutcomes.com	Power Up Lubricants NZ Ltd 41 Hororata Road, RD 2 Darfield, 7572 Canterbury, New Zealand corin@powerupnz.co.nz Telephone: +64 3 962 9990/0800 33 66 66 Emergency No: 0800 764 766 (National Poison Centre)
Emergency telephone number (with hours of operation)	: +1 587-353-2000 1-844-512-4093 8am-5pm Mountain time	

Section 2. Hazards identification

HSNO Classification	: 6.3 - SKIN IRRITATION - Category B 6.4 - EYE IRRITATION - Category A (Irritant) 6.5 - SENSITIZATION - Category B (Skin) 9.1 - AQUATIC ECOTOXICITY - Category D
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This material is classified as hazardous according to criteria in the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001 and has been classified according to the Hazardous Substances (Classifications) Regulations 2001.

This material is not classified as DANGEROUS GOODS according to criteria in New Zealand Standard 5433:2012 Transport of Dangerous Goods on Land.

GHS label elements

Signal word	: Warning
Hazard statements	: Causes mild skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. May cause long lasting harmful effects to aquatic life.
<u>Precautionary statements</u>	
Prevention	: Wear protective gloves. Wear eye or face protection. Avoid release to the environment. Avoid breathing dust. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.
Response	: IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Storage	: Not applicable.



Section 2. Hazards identification

Disposal : Dispose of contents and container in accordance with all local, regional, national and international regulations.

Symbol :



Other hazards which do not result in classification : None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Other means of identification : ThixoSYN

Ingredient name	% (w/w)	CAS number
Distillates (petroleum), solvent-refined heavy paraffinic	10 - 30	64741-88-4
Calcium carbonate	10 - 30	471-34-1
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	1 - 5	68584-23-6
Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts	1 - 5	70024-69-0
Calcium dodecylbenzenesulphonate	1 - 5	26264-06-2
bis(Nonylphenyl)amine	1 - 5	36878-20-3
Polysulfides, di-tert-dodecyl	1 - 5	68425-15-0

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Inhalation

: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Ingestion

: Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Section 4. First aid measures

- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 20 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes. Get medical attention.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Inhalation** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.
- Skin contact** : Causes mild skin irritation. May cause an allergic skin reaction.
- Eye contact** : Causes serious eye irritation.

Over-exposure signs/symptoms

- Inhalation** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.
- Skin** : Adverse symptoms may include the following:
irritation
redness
- Eyes** : Adverse symptoms may include the following:
pain or irritation
watering
redness

Indication of immediate medical attention and special treatment needed, if necessary

- Specific treatments** : Not available.
- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Firefighting measures

Extinguishing media

- Suitable** : Use an extinguishing agent suitable for the surrounding fire.
- Not suitable** : None known.
- Specific hazards arising from the chemical** : This material may cause long lasting harmful effects to aquatic life. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides
sulfur oxides
carbonyl halides
metal oxide/oxides
- Hazchem code** : Not available.



Section 5. Firefighting measures

- Special precautions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

- Personal precautions, protective equipment and emergency procedures** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).
- Environmental precautions** : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.
- Methods and material for containment and cleaning up**
- Small spill** : Move containers from spill area. Vacuum or sweep up material and place in a designated, labelled waste container. Dispose of via a licensed waste disposal contractor. Avoid dust generation. Using a vacuum with HEPA filter will reduce dust dispersal. Place spilled material in a designated, labeled waste container.
- Large spill** : Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labelled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container.

Section 7. Handling and storage

- Precautions for safe handling** : Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid release to the environment. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Distillates (petroleum), solvent-refined heavy paraffinic	NZ HSWA 2015 (New Zealand, 11/2017). WES-TWA: 5 mg/m ³ 8 hours. Form: Mist WES-STEL: 10 mg/m ³ 15 minutes. Form: Mist
Calcium carbonate	NZ HSWA 2015 (New Zealand, 11/2018). WES-TWA: 10 mg/m ³ 8 hours.

Appropriate engineering controls : No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Respiratory protection : Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Eye protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Skin protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Section 9. Physical and chemical properties

Appearance

Physical state	: Semi-solid./ Grease.
Colour	: Tan.
Odour	: Mild petroleum.
Odour threshold	: Not available.
pH	: Not applicable.
Melting point	: 300°C (572°F)
Boiling point	: Not available.
Flash point	: Closed cup: >180°C (>356°F) (Base oil.)
Evaporation rate	: Not available.
Flammability (solid, gas)	: Not available.
Lower and upper explosive (flammable) limits	: Not available.
Vapour pressure	: 0 kPa (0 mm Hg) [room temperature]
Vapour density	: Not available.
Relative density	: 0.95 to 1.05 g/cm ³ @ 25°C
Solubility	: Negligible in water.
Solubility in water	: Not available.
Partition coefficient: n-octanol/water	: Not available.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
Viscosity	: Not available.
Flow time (ISO 2431)	: Not available.

Section 10. Stability and reactivity

Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: No specific data.
Incompatible materials	: Reactive or incompatible with the following materials: oxidising materials.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on likely routes of exposure

Inhalation	: No known significant effects or critical hazards.
Ingestion	: No known significant effects or critical hazards.
Skin contact	: Causes mild skin irritation. May cause an allergic skin reaction.
Eye contact	: Causes serious eye irritation.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation	: No known significant effects or critical hazards.
Ingestion	: No known significant effects or critical hazards.

Section 11. Toxicological information

Skin contact : Adverse symptoms may include the following:
irritation
redness

Eye contact : Adverse symptoms may include the following:
pain or irritation
watering
redness

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

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Calcium carbonate	LD50 Oral	Rat	6450 mg/kg	-
Calcium dodecylbenzenesulphonate	LD50 Oral	Rat	1300 mg/kg	-

Irritation/Corrosion

There is no data available.

Sensitisation

There is no data available.

Potential chronic health effects

- General** : No known significant effects or critical hazards.
- Inhalation** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.
- Skin contact** : Once sensitised, a severe allergic reaction may occur when subsequently exposed to very low levels.
- Eye contact** : No known significant effects or critical hazards.
- Carcinogenicity** : No known significant effects or critical hazards.
- Mutagenicity** : No known significant effects or critical hazards.
- Teratogenicity** : No known significant effects or critical hazards.
- Developmental effects** : No known significant effects or critical hazards.
- Fertility effects** : No known significant effects or critical hazards.

Chronic toxicity

There is no data available.

Carcinogenicity

There is no data available.

Mutagenicity

There is no data available.

Teratogenicity

There is no data available.

Reproductive toxicity

There is no data available.

Specific target organ toxicity

There is no data available.

Aspiration hazard

There is no data available.



Section 11. Toxicological information

There is no data available.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral	55000.26 mg/kg

Section 12. Ecological information

Ecotoxicity : This material may cause long lasting harmful effects to aquatic life.

Aquatic and terrestrial toxicity

Product/ingredient name	Result	Species	Exposure
Calcium carbonate	Acute LC50 >56000 ppm Fresh water Chronic NOEC 61 mg/g Fresh water	Fish - Gambusia affinis - Adult Fish - Oncorhynchus mykiss - Juvenile (Fledgling, Hatchling, Weanling)	96 hours 28 days

Persistence/degradability

There is no data available.

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
Distillates (petroleum), solvent-refined heavy paraffinic	3.9 to 6	-	high
bis(Nonylphenyl)amine	3.64 to 7.02	1730	high
Polysulfides, di-tert-dodecyl	>6.2	-	high

Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods

: The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	New Zealand	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-
Transport hazard class(es)	-	-	-
Packing group	-	-	-
Environmental hazards	No.	No.	No.

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to IMO instruments : Not available.

Section 15. Regulatory information

HSNO Approval Number : Not available.
HSNO Group Standard : Not available.
HSNO Classification : 6.3 - SKIN IRRITATION - Category B
 6.4 - EYE IRRITATION - Category A (Irritant)
 6.5 - SENSITIZATION - Category B (Skin)
 9.1 - AQUATIC ECOTOXICITY - Category D

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

Australia : All components are listed or exempted.
Canada : All components are listed or exempted.
China : All components are listed or exempted.



Section 15. Regulatory information

Europe	: All components are listed or exempted.
Japan	: Japan inventory (ENCS): Not determined. : Japan inventory (ISHL): Not determined.
New Zealand	: All components are listed or exempted.
Philippines	: All components are listed or exempted.
Republic of Korea	: All components are listed or exempted.
Taiwan	: All components are listed or exempted.
Thailand	: Not determined.
Turkey	: Not determined.
United States	: All components are active or exempted.
Viet Nam	: Not determined.

Section 16. Other information

History

Date of issue/Date of revision	: 30/08/2020
Date of previous issue	: Not applicable.
Version	: 1
Internal code	: 513-009
Prepared by	: KMK Regulatory Services Inc.
Key to abbreviations	: ADG = Australian Dangerous Goods : ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road : ATE = Acute Toxicity Estimate : BCF = Bioconcentration Factor : GHS = Globally Harmonized System of Classification and Labelling of Chemicals : IATA = International Air Transport Association : IBC = Intermediate Bulk Container : IMDG = International Maritime Dangerous Goods : LogPow = logarithm of the octanol/water partition coefficient : MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) : RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail : SGG = Segregation Group : UN = United Nations

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